THE

MEDICAL AND SURGICAL REPORTER.

No. 1414.] PHILADELPHIA, APRIL 5, 1884. [Vol. L.—No. 14.

ORIGINAL DEPARTMENT.

COMMUNICATIONS.

THE UNKNOWN FACTOR IN THE EQUATION OF THE NERVOUS SYSTEM.

BY J. M'P. GASTON, M. D.,

Of Atlanta, Ga.

(*Concluded from page* 388.)

An independent order of small uniform tubes serves to connect the final ramifications of the arteries and the initial developments of the veins. Even in the original investigations of Harvey, upon the circulation of the blood, communicating channels were recognized, by which the transfer of the blood from the arteries to the veins becomes established. Yet, the discovery of a distinct arrangement of vessels, known as the capillary system, was reserved for the genius of Malpighi, who elucidated the general properties of this connecting-link in the circuit of the blood. The special physiological role of these intermediate tubercles is not, however, as yet, fully comprehended. It is evident that the blood is conveyed through this network of filiform ducts from one to the other set of vessels; but what physical law controls this transmission has not been clearly defined; nor is the element that effects the appropriation of alimentary particles, and causes the alteration in the blood, duly understood. The impulse given by the heart, propagated through the elasticity of the coats of the arteries, is sufficient to urge forward the column of blood in its course until it reaches the capillaries.

After passing through this sieve-like structure, and undergoing a process by which its nutrient elements are incorporated into the various tissues, the current of the blood enters the small initial venous branches on the other side, and under the influence of the vis a tergo, and the suction of the gradually enlarging calibre of the veins, it is then conveyed along the venous trunks, until, by the active dilatation of the right ventricle, it enters the heart. This seems all very simple; but what is the nature of the dynamic action upon the blood in its passage through the intermediate conduit betwixt the arteries and the veins remains to be settled. It is the province of all tubes of small calibre to promote the entrance of fluids to a limited extent, even against the force of gravity. Beyond this capillary attraction, there is nothing in the anatomical arrangement of these tubes which determines the flow of blood. The capillaries have an action distinct from the heart; but what is the character of that capacity for independent action is not well understood; and this factor is lacking for a due comprehension of the correlation of the vital forces.

The vaso-motor system supplies the nerve element that pertains to the coats of the arteries, and it may appear that we need not look beyond this recognized distribution of the ganglionic nerves for a clue to the circulation of the blood; yet the student of physiology will fail to discover in the ramifications of this class of nerves any correspondence to what has been referred to as the dynamic property of the nerves.

While the excito-motor element of the nervous system is intermittent and even accidental in its manifestations, and the excito-secretory function is variable, being dependent upon many concomitant circumstances for its operation and results,

the vaso motor system does not sufficiently elucidate the supposed relations of the external and internal parts of the body, that are vaguely comprehended in the term sympathy.

The property of the nervous system which I would indicate as the excito dynamic element is more constant and continuous in its bearing upon the physical and vital operations of the organism. In its inherent quality of sustaining the forces of the organization, we have, as it were, the mainspring of life. Either of the other attributes of nerve-power might be arrested temporarily without impairing seriously the performance of the vital functions. Should there occur, however, any interruption of the function of the dynamic system, the machinery that is dependent upon its influence would cease to act, and death must ensue.

The due operation of this vital force, if I may use a much abused term, can be modified, but not suspended, consistently with the role of the various organs, nor can it be interrupted for any appreciable period consistently with the life of the organism.

It is evident that the plexus of nerve fibrils that enters into the network of the capillaries is so correlated with the ganglionic system of nerves as to afford a connection with the entire corporal structure, and that through this channel an influence is propagated to every part of the physical organization for good or for evil. The data here presented afford a proper basis for practical experiments as to the relations of the nerves to vital force; and I trust that the connection of the subcutaneous nerves and capillaries with the internal organs and the entire organism may soon be clearly defined.

The transmission of a telegram by the electric fluid does not more clearly prove the existence of the battery and the conducting wire, by which it passes, than the facts growing out of the developments of health and disease demonstrate a nervous connection which implies the excito-dynamic function of the central system of nerves.

This inference from clinical observation requires confirmation by a series of experiments; and I await with confidence the results of experimental investigation respecting the intricate and complicated relations of the cerebro-spinal and ganglionic nerves for the presentation of facts to sustain my theory of an excito-dynamic division of the nervous system, independent of the vaso-motor nerves.

Whatever doubts may be entertained as to the route traced by poisons that are brought into contact with the minute net-work of the nerve fibrils and the capillary vessels in the areolar and cellular tissues, there can be no question as to an extraordinary and rapid transmission of an injurious impression to the other tissues, and to the different internal organs. The point to be set clear in a clinical aspect, is the reciprocal relation of cause and effect; and the clue to a rational solution must rest with experimental physiology.

The constant operation of impressions by a link of connection independent of the afferent and efferent nerves, strengthens the inference from clinical observation, in favor of a special nervous communication between the outer and inner parts of the body. If this hypothesis can be sustained by future experimental demonstration, it may be accepted as a final and satisfactory explanation of the unknown quantity in the problem of physiology and pathology, as respects the nerve element.

The same difficulties that are encountered as to the true explanation of the prompt effect of poisons, which are introduced beneath the cuticle, present themselves in the consideration of the influence of subcutaneous remedies. Should my suggestion prove to have a proper basis, it may seem to relieve all cases in either department of any embarrassment.

In deducing from facts the great principles involved in the reciprocal relations of the different parts of the organization, we have a rational explanation of the physiological and pathological development of the organism in the vital functions. If my effort to illustrate the principle I would inculcate fails to convey a distinct conception of what is to be supplied, it may at least suffice to create a strong presumption in favor of the reality of the basis upon which hypodermic and other medicated injections are preferred for the cure of diseases.

Some of these medicinal agents are introduced with a view to their remote influence, while others are used to modify the tissues into which they are injected, and hence for a purely local effect.

The aim of this paper is to impress the advantages of subcutaneous and other injections of medicinal agents over the administration of remedies by the mouth, and to inculcate especially that this depends upon the prompt introduction of the agent by the correlation of the nerve fibrils and capillaries with the central nervous system, and that the effect ensues to a large extent from a peculiar influence propagated to the organization of the various parts.

This final result of all such applications is not

a consequence of reflex action emanating fron the excito-motor nerves, nor from the excito-secretory nerves, nor yet from the vaso-motor element of the nervous system. It is accomplished through a function of the nerves quite distinct from either of these recognized properties, and which underlies all other exhibitions of nerve power.

Conflicting opinions are held by those entitled to our consideration form their practical and experimental investigations, in regard to the relations of the nervous system to the dependent organs. While Brown-Sequard recognizes the medulla and spinal cord as the chief source of "the nerve influences in the tissues," Dr. W. H. Gaskill, by his investigations in the physiological laboratory at Cambridge, concludes that "many phenomena now believed to be produced by the agency of the nervous system may be really independent of it."

Until these antagonistic views of physiologists are reconciled by more conclusive experiments and observations, we must be content to grope our way, with the light of clinical experience.

As the theory proposed by Dr. H. F. Campbell in regard to the excito-secretory division of the nervous system, deduced from his clinical observations, was confirmed by the experiments of Marshall Hall, I await some similar result of experimental inquiry in support of my view of an excito-dynamic division of nerves, distinct from, and entirely independent of, the vaso-motor element of the nervous system. The local influence that effects an alteration in any part, is of little consequence, in comparison with the vital change which is operated in the tissues and organisms, by the relation of the excito-dynamic element of the central nervous system to the great sympathetic nerve and its ganglionic ramifications. The interlocking and interlacing that exists betwixt the distribution of the cerebro-spinal system and the ramifications of the organic system of nerves, afford the conditions upon which the sympathies of the excito-dynamic function of the nerves operate. This nice arrangement of the ultimate development of the minute fibres of the two sets of nerves, is found in the remote plexus associated with the distal circulation, destined to supply nourishment to every separate atom of matter that enters into the composition of the body. The interchange of powers growing out of this relation in all parts of the organization, being closely associated with the capacities of the deep-seated nerve-centres, presents a series of reciprocal actions, and the actions that constitute what are vaguely styled the sympathies of the different portions of the system, and which is herein designated as the excito-dynamic element of the nervous system.

"RIGIDITY OF THE CERVIX UTERI AND THE USE OF ERGOT."

BY T. J. HAPPEL, M. D.,

Of Trenton, Tenn.

On page 232 of the MEDICAL AND SURGICAL REPORTER, February 28, 1884, I find an article on the above subject, apparently in the form of an inquiry as to the methods of procedure.

Labor, at best, is, to the patient undergoing its throes, a physiological process involving much suffering. It behooves medical men, therefore, to do everything that can safely be done to alleviate their pain, and to enable them to undergo with fortitude as well as safety their, to them, dreaded ordeal.

"Patience and a cheerful demeanor" on the part of the medical attendant are of prime importance in every case of labor, and especially in those characterized by rigidity of the os. One great reason why in former times lacerations of the cervix were not recognized, was that these lacerations much more rarely existed. Labor was not hurried through by the attending physician, that he might either rush to another case of labor, or that he might not lose his much-coveted sleep, or fail to make some other desired call, as is too frequently the case in these days of rush, and greed for gain.

Ergot and the forceps, two of the most powerful agents for good in obstetric practice, have inflicted upon females an unknown and an untold amount of damage. A labor lingers; a physician calls, a few questions are asked, a hurried examination is made; a dose of ergot, greater or less, as thought needed, is administered; tonic contractions of the uterus result: by the efforts of the woman the uterus and its contents are forced low down in the pelvis, the vertex is recognized as presenting, the forceps are applied, and the child forcibly delivered. The physician flatters himself that he has performed a skillful (?) operation, and goes off, after having made a slight examination of the perineum. The woman!—well, after a slow and tedious convalescence, she gets out; but, as she expresses it, "has no back." Later on, perhaps never, a lacerated cervix is recognized. I do not think I overdraw the picture. Ergot and the forceps are both abused.

To explain my own procedure, I would cite the following cases, occurring in my practice since January 1, 1884:

Case 1. January 7, 1884, was hurriedly called to visit ——, colored. The messenger reported that, after some slight pains, the waters had broken; since then, that the intervals between the pains had been long and irregular. I reached the case at 3 p. m. The facts, as stated above, were repeated. The patient was a large, fleshy female of relaxed, scrofulous habit; multipara, third labor. An examination revealed the uterus high up, the os dilated about an inch, but very dilatable, thick, flabby. The pains were slight—intervals from fifteen to thirty minutes. After delaying and watching a few pains, I administered liq. ergotæ purificat., ♏ xv.; fl. ext. ipecac, ♏ ij. to ♏. v. M., every fifteen minutes, till four portions had been given. When the pains began to increase in frequency and strength, I then gave a double portion of the ℞. at a dose, and at 4½ p. m. the patient was safely delivered. No trouble from the placenta, which was removed in about five minutes. No hemorrhage. Before leaving I gave liq. ergot. pur. ʒj. Patient did well. Suffered but little from after-pains.

Case 2. January 17, 2 a. m., Mr. —— called me to see his wife. Third labor. Waters had broken after a few pains, which had recurred irregularly from twelve o'clock. Patient was nervous, dreading the labor, on account of the, to her, irregular beginning. Soon quieted her fears, and made an examination. Os rigid, not dilated enough to admit the extremity of the index finger. Administered at once ℞. morphiæ sul., grs. ¼; atropiæ sul. grs. $\frac{1}{80}$, hypodermically. In half an hour the patient was free from all pain and nervousness, and soon went to sleep. Left her and returned home, a short distance off.

Called at 9 a. m. Patient had rested well; was feeling slight pains occasionally. An examination revealed an os dilated to the size of half-a-dollar, and dilatable slightly. Repeated the hypodermic injection same as before, and left, with directions to call me when pains returned.

Was summoned at 4 p. m. Found pains regular; patient cheerful, had slept and rested well until an hour before; had not vomited. Dilatation almost complete; uterus low down; all the parts soft and dilatable. By 5 p. m., the patient was delivered of a seven-pound girl. During the expulsive pains chloroform was used. After the expulsion of the child, liq. ergotæ pur. ʒj. was given. The placenta was delivered in less than ten minutes.

Case No. 3. January 18, 3 a. m., Mr. —— called me to see his wife, multipara, seventh child. He reported that at 1 a. m. his wife was aroused by the escape of "the waters." Arriving at the house, about three miles out of town, I found the wife sitting up, cheerful, but a little nervous, over what she expected to be a tedious labor. An examination revealed a thick, rigid os. Treated as Case No. 2, and at 2 p. m. pains began to be regular. I found upon examination an os dilated about two inches, somewhat dilatable, thick. Gave

℞. Liq. ergotæ pur., ♏ xv.
Fl. ext. ipecac, ♏ v.
M.

And repeated dose in 15 minutes.

In half an hour after the second dose labor ended. Chloroform was offered during the second stage of labor, but was refused. The case was completed as in the second case.

Case No. 4. January 22. Was called at 2 a. m. to see Mrs. ——, multipara. The history of No. 3 was repeated. Was soon at the bedside. Pains were vigorous, os dilating steadily; no rigidity. Nothing was given until the expulsive pains began, when a small amount of chloroform was inhaled. Labor was completed at 5 a. m. Ergot was administered after the expulsion of the child, as in the other cases. The placenta was extracted in five minutes, without trouble.

Case No. 5. January 24. Visited her. Multipara, third labor. Nervous and hysterical. Claimed to have suffered for forty-eight hours. No dilatation of the os, parts rigid, and rather dry. Hypodermic injection of morph. sulph. gr. ⅓, combined with atropiæ sul. gr. $\frac{1}{60}$, was administered. In twenty minutes she became quiet and sleepy. Returned home. Was called the next night at 9 p. m. Had vomited from the morphia. Pains regular. Os rigid, but slightly dilated, membranes protruding. A small fibroid, about the size of a small hickory-nut, on the anterior external surface of the anterior lip of the cervix. Repeated the hypodermic injection, and waited. At 12 m., the os began to relax and dilate, the posterior half of the cervix being very dilatable, the anterior being markedly interfered with by the fibroid. Pains were very inefficient, and after a little delay, began using the ergot and ipecac, as in Case 3, in the same dose, repeating every fifteen minutes. The pains soon increased in efficiency. Patient vomited frequently. Soon after the fifth dose dilatation was completed. The head passed the os without laceration, and labor was completed under chloroform at 2 a. m. The membranes did not rupture till just before the birth of the child. Before leaving, gave ergot, as in the other cases.

Case No. 6. January 27. W. B., multipara.

Labor began with the escape of the waters at midnight. Saw her at 8 a. m. Pains had been light, irregular, and inefficient. Os soft, thick, dilated an inch in diameter, very dilatable, soft parts much relaxed. Waited an hour. Only one or two very slight pains. Gave

℞. Liq. ergotæ purif., ♏xx.
Fl. ext. ipecac, ♏iv.
M.

Repeated every 20 minutes.

After the third dose active labor began. At 10 a. m. dilatation was complete. Child was expelled at 11 a. m. Ergotæ ʒj was given at once. In ten minutes the placenta came away, under friction over the uterus, and slight traction upon the cord.

Case No. 7. February 18. Visited Mrs. ——, primipara, at 4 a. m. Labor began with the rupture of the membranes and escape of the waters at 1 a. m. Patient was nervous and despondent. Digital examination revealed uterus high up, os rigid, no dilatation. At once gave hypodermically ℞. Morphiæ sul., grs. ¼; atropiæ sul., grs. $\frac{1}{80}$. Quiet in twenty minutes. Left her. At 10 a. m. pains returned. Os rigid, but dilating slowly. Repeated the hypodermic injection. At 1 p. m. pains regular; os dilating—thin, soft; patient cheerful. At 3 p. m. the pains, though regular, were short, and devoid of strength. Began giving liq. ergotæ, ♏xv., repeated every twenty minutes. After the third dose pains more active, and at 4½ p. m. patient gave birth to an eight-pound boy. No laceration, and but little soreness. Urine was drawn with catheter once, after labor. Chloroform was used during most of the second stage, but weakened the pains. Case was completed as the others.

Case No. 8. February 21. Attended Mrs. —— in her second confinement. Waters discharged with first pain at 3 a. m. Was called at 8 a. m. Patient in best of spirits; pains slight and at long intervals; os soft, thin and dilatable; external parts well relaxed. After waiting an hour, I gave ergot ♏ xx., and in twenty minutes repeated it. At 10 a. m., pains more active and regular. Then give

℞. Liq. ergotæ pur., ♏xx.
Fl. ex. ipecac, ♏vj.
M.

At 11 a. m. expulsive pains began, the dilatation being complete. Before 12 m. a 7½-pound girl was born. Chloroform was used as in case No. 7. The placenta was removed in five minutes, the extraction being preceded by the ergot, ʒss.

In my whole practice I have never met with as many consecutive cases, beginning as these did with the discharge of the waters.

The histories given set forth the treatment that I follow in such cases.

In *all* cases of rigidity of the os, with little or no dilatation, I use the hypodermic injection of morphia and atropia, proportioning to suit each case. I regard the combination as better than morphia alone. Pain is relieved by the morphia, and at the same time none, or at worst but *few*, of its unpleasant effects are experienced. Atropia counteracts many of them, stimulates the patient, keeps up the the capillary circulation, etc.

In the course of four hours, if needed, I repeat the injection; but if the os is dilating and thin and dilatable, I do not.

My experience with chloral in such conditions has not impressed me favorably. Chloral has proven with me, in safe doses, only an hypnotic, not an anæsthetic. In full and repeated doses it might have, and no doubt does have, anæsthetic properties strongly marked. I think I am sustained in these views by Ringer in his Therapeutics.

Gelsemium is unreliable.

In most primiparous cases, except such as are unusually rapid, I give morphia and atropia to prevent the wearing out of the patient during the tedious first stage of labor.

In cases where the os is partially dilated, dilatable, thin, and the pains normal and effective, I do nothing, but trust solely to nature; but in the same condition of the os, with the pains slow, irregular, and ineffective, I administer liq. ergotæ purif., or fl. ext. ergotæ ♏xv.–♏xx., repeated every fifteen or twenty minutes, adding usually after the third or fourth dose, fl. ext. ipecac ♏v.–♏x.

In cases where the os is partially dilated, soft, dilatable, but thick, if the pains are normal, I administer a few doses at intervals of fifteen minutes of fl. ext. ipecac ♏v.–♏x.; but in the same state of the os, with pains slow, irregular, and accomplishing nothing, I administer liq. ergotæ pur. ♏xv.–♏xx., fl. ext. ipecac ♏iv.–♏vj. Repeat every fifteen or twenty minutes through the first stage of labor.

In cases where the os is thin, partially dilated, but not dilatable, with pains active, I use chloroform.

In cases similar to the last, except a thick os, I would administer hypodermically morphia and atropia, and then if necessary follow with ergot, or ergot and ipecac.

Where the membranes have not ruptured, and where no rigidity is present, I trust to nature, except in cases of primiparæ already referred to.

In a practice of more than ten years, taking the above rules as my guide, in my own practice, in about six hundred cases of child-birth, I have never had to apply the forceps, nor had a lacerated cervix or perineum, but have frequently in consultations used the forceps—in two cases recently—and have seen and operated on two cases of lacerations of the perineum, and one of the cervix; and have recently been consulted about two other lacerations of the perineum within less than three months.

One further use for ergot in obstetric cases. As soon after the expulsion of the child's head as possible, and always before removing the placenta, I give ʒj. of ergot, and unless very firm contraction of the uterus takes place, before I leave the house I repeat the dose.

I have never been troubled with excessive hemorrhage.

A CASE OF SCIRRHUS OF THE PANCREAS SIMULATING ABDOMINAL ANEURISM.

BY M. W. LILLY, M. D.,
Of Grand View, Iowa.

Mrs. J. D. Wade, aged fifty-three, rather above the medium size, and of a bilious temperament. Has been poorly for years; mostly bilious and neuralgia, with a special tendency to stomach and uterine troubles.

History.—In the evening of September 1, 1883, I was called to see her. She was sitting up, and gave me about this history: More or less of the time since February last, has been troubled with a burning pain a little to the left of the pit of the stomach. Sometimes it is a throbbing, and then again a shooting pain, upward into the heart and gullet, into the back, and occasionally downward. Sometimes the burning seemed more in the œsophagus than in the stomach, but not often. Food, even in small quantities, distressed the stomach, and made the pain worse immediately after being taken, but otherwise the functions of the stomach were not much impaired. But seldom troubled with flatus or costiveness. Kidneys and bladder gave her some trouble, also a cough; but these, she said, were not worse than they had been for the last fifteen years at times. Another physician had had the care of her for the last six or eight weeks. I found her decidedly salivated from medicine taken that morning, some of which remained, together with some large doses of salicylate of soda and some drops containing belladonna and gelseminum. I discontinued these, and applied myself to the ptyalism and the purging and vomiting which still continued.

On the 2d doing fairly well.

On the 3d I examined the stomach more carefully—had been too irritable before—and found it not very tender except on deep pressure. At this visit I first discovered a small pulsating tumor, which I judged to be behind the lower edge of the stomach and transverse colon, and an inch to the left of the median line. In size it was about as large as one's finger, by 2 or 2½ inches long, lying vertically, and rather tender. On the palmar surface of each hand, opposite the carpo-metacarpal joint of the fourth finger, was a small purplish spot, about 5 by 8 lines in extent. They were under the skin, and disappeared under pressure. The pain in or under the stomach being worse of evenings, I gave quinine and applied a blister.

I saw her on alternate days till the 10th, during which time I blistered twice, and gave sulph. hydrastis, willow charcoal, and chlor. potash, on which she improved. Spots on the hands spread a little.

Did not visit her again until the 20th, and again on the 27th. Found but little change.

October 2. A good deal of pain in the uterus, particularly if on her feet at all. Made an examination per speculum, finding a small abrasion only on the posterior lip, though considerable cervical endometritis and leucorrhœa.

October 10. About the same.

October 18. Saw her with Dr. J. H. Graham, of Morning Sun. Found her about the same as on my last two visits. We used local treatment for the uterus, and continued small and frequent blisters over the stomach, with the wil. charcoal and chlor. potas. internally.

November 19. Saw her again, with Dr. Graham, to-day. For the last month I had found her gradually growing worse. The tumor was perceptibly larger; also, the spots on the hands, which now cover nearly all of the palms but the centres, and the face and edges of most of the fingers from the nail to the first joint. They are mostly of a deep scarlet color, in which are smaller purplish spots, somewhat raised, exceedingly tender, and having a constant burning pain which nothing relieves. Some days both these colors are more marked, and the spots more tender, at which times the pain and distress about the stomach are usually better. Also, at this period she had three or four slight attacks of conjunctivitis. The burning, throbbing pain in the stomach and tumor is becoming more constantly severe, and the strength and flesh failing. Food distresses the stomach very much, it being with the utmost care that she can

take any nourishment. Can sit up but little now, and lies with limbs flexed to relieve the tension of the abdominal muscles.

As to treatment during this time and for the three following weeks, we tried many things, among which were nitrate of silver, dil. phosph., and sulph. acids, aqua calcis, creasote, bromid. potass., deod. tr. opium, and fl. ex. Jamaica dogwood. The last two the stomach would not retain, and the others did no good, or but for a short time only. Blisters were frequently repeated, but they have lost their efficacy, and vesicate but poorly. The charcoal and chlor. potass. would usually give the most relief of anything used. We urged the hypodermic injection of morphia, but she would not consent to it till December 7th, when she became much worse, and the pain unbearable.

(*To be Continued.*)

ATONY OF THE BLADDER.

BY J. B. JOHNSON, M. D.,

Of Washington, D. C.

I was called on the 15th of November to visit Mr. S., at Harper's Ferry, West Virginia. I found him to be a man of seventy-two years, with a good constitution, temperate habits, and moral character. His appetite was good, tongue clean, and bowels regular. He said he suffered no pain, but felt himself growing gradually weaker, and that he had lost all power to pass his water; that day and night it was dribbling from him, unfitting him for business, causing great inconvenience, keeping him constantly wet, and always with a cold; and that he had been in this condition for two years, but for the last six months his difficulty had steadily increased. On exposing the abdomen, I saw the urine coming away, drop by drop; and placing my hand over the bladder, found it hard and distended, occupying the whole hypogastric region. He had never been catheterized, and possessed great dread of the instrument; but on being assured that its use was of the utmost importance to an intelligent understanding of his case, he readily gave his consent to its use; and selecting a well-curved No. 11 gum catheter, I passed it, well oiled and warmed, without the slightest obstruction, into the bladder, and as soon as the point of the catheter entered the bladder, the pent-up urine began to flow freely through it, and continued to flow until *four pints and a half* passed off. I then stopped the flow of the urine by withdrawing the catheter, and administered immediately by the month sixty drops of tincture of opium to keep off nervous excitement, and requested him to go to bed and be quiet. He suffered not the slightest faintness during the emptying of his bladder: and four hours after the first use of the catheter, I requested him to introduce for himself the instrument into the bladder, which he did without pain or trouble, and again one pint and a half of urine passed off. I then repeated the sixty-drop dose of tincture of opium, and left him in charge of Dr. Spangler, of Harper's Ferry.

This was a well-marked case of atony of the bladder, unattended by previous disease of either the brain or spinal cord, and attended by very slight enlargement of the prostate gland. It was a loss of the contractile power of the muscular coat of the bladder, and caused by a slight enlargement of the prostate gland, attended with the habit, on the part of the patient, of retaining his urine too long in the bladder. It painlessly came on gradually, and its increasing presence was more and more manifested by an increase of the escape of urine drop by drop, accompanied by frequent and unsuccessful efforts to urinate. The catheter, rest, tonic medicines, and nourishing diet, are the only means we possess of palliating such distressing troubles of advanced life.

MODIFICATION OF COHEN'S LARYNGEAL FORCEPS, MAKING THEM ADAPTABLE FOR POST-NASAL, PHARYNGEAL, AND LARYNGEAL APPLICATIONS.

BY CHARLES E. SAJOUS, M. D.,

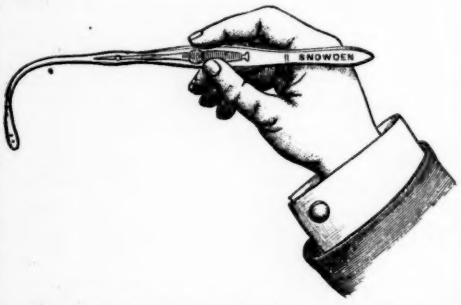
Instructor on Laryngology and Rhinology in the Summer and Post-Graduate Courses, Jefferson Medical College, etc.

The spring, slide and catch, and general conformation of Dr. Cohen's valuable instrument having been preserved, the only modification, as shown in the cuts below, is in the shape of the curve, which, instead of a right-angle, assumes that of the arc of a circle, with retrocession of the tip towards the centre.

In the posterior nares, this peculiar curve renders it available for applications to the turbinate mucous membrane, mouth of the eustachian tubes, pharyngeal vault, etc., the position of the tip being regulated by that of the handle. In simple curves, that is to say those in which the axis of the tip is at right-angles with that of the handle, the tip does not reach the inferior turbinated bones, or the floor of the posterior nares, the depression of the lower jaw not permitting sufficient depression of the handle.

For the pharynx, it takes the place of the straight forceps when held horizontally, directing the tip toward the pharyngeal wall, and enables the operator to medicate in one application the whole tract from the vault to the beginning of the œsophagus.

For the larynx, the curve following a line passing over the tongue and the posterior surface of the epiglottis to the middle of the vocal bands, it preserves the advantages of right-angle instruments, without involving their difficult manipulation.



The instrument is smaller and lighter than Dr. Cohen's.

—Iodoform is being adulterated with picric acid, according to Jules Libert, a pharmacist of Liége, Belgium.

Hospital Reports.

A CLINICAL LECTURE DELIVERED IN THE HOTEL DIEU, PARIS, FRANCE.

BY DR. F. RAYMOND.

Fellow of the Society of Medicine, Physician to the Hospice des Incurables.

1. Acute Meningitis in the Course of Typhoid Fever. 2. Tubercular Meningitis in an Adult.

(*Continued from page* 394.)

This case is worthy of a place among several others which have been published. The meningeal complications, and those pertaining to the nervous system generally, in the course of general diseases, of grave pneumonias (the pneumonias, for example, which occur in alcoholic patients), in erysipelas, etc., are to-day well-known. You ought, in this connection, to consult the excellent thesis of M. Landouzy, in that part which concerns principally paralysis complicating acute diseases. Many pathogenetic theories have been put forth to explain such complications. Without stopping to discuss these pathogenetic theories, I desire to remark that typhoid fever is in reality a disease *totius substantiæ;* it affects all the anatomical elements, and hence the encephalon as well as the other organs. What is there then that is strange in the fact of a cerebral complication arising in a person predisposed? Has it not been remarked that the secondary meningitis of pneumonia is seen principally in drunkards predisposed by their habits to cerebral affections? Is it probable that our patient was rendered liable to this cerebral malady by his occupation? I simply put the question. It is by no means improbable that some would be disposed to blame the salicylate of magnesia for the cerebral manifestations from which the patient died. Salicylate of soda has been accused of producing meningitis when given in large doses for acute articular rheumatism, especially in the case of alcoholic patients; those particularly who were suffering from renal lesions. When given for typhoid fever the same remedy has been accused of determining cerebral complications.

In support of this view, we have been reminded of the nausea and vomiting which sometimes attend the administration of this agent. It has also been said that in some cases the cephalalgia has been greatly aggravated. I have no personal experience in this matter, as far as typhoid fever is concerned, nor have I ever seen accidents of this kind in rheumatic patients treated with the salicylate. It is true that I took care beforehand to assure myself that my patients were not alcoholic, and that there was no kidney trouble. In the case under consideration, ought we to incriminate the large doses of salicylate of magnesia employed? I do not think so, because the patient at no period of the administration of the medicament had either nausea, or vomiting, or excess of pyrexia; in a word, there was no symptom of poisoning. All these points, however, deserve to be brought up and discussed.

2. I shall be more brief in my account of the second case. You see before you, gentlemen, portions of the diseased organs of the patient, the results of the autopsy. I shall attend only to

the essential particulars of the clinical history, facts of this kind being relatively numerous. The patient concerning whom I am to speak is a female aged 45, who entered the hospital August 16, ward St. Jeanne, No. 21.

August 17, when I made my morning visit, I found her in a state of stupor, almost insensible to everything happening around her; she was with difficulty made to reply in monosyllables to questions asked her. She complained of violent headache, the pain being all over the head, also of utter prostration. The head was inclined towards the right shoulder, the face looking upward and to the left; and on trying to straighten it, we met with great resistance, due to contraction of the muscles of the back of the neck. The patient could not bend the head, and if force were used to bend it, she uttered outcries and complained of violent pains in the occiput and back of the neck. There was a slight degree of contraction in the right arm; the left arm and the left lower extremity were unaffected. General hyperæsthesia. Pinching or compression of the arms or legs, elicited severe pain. The right upper eyelid was closed, as if by paralysis of its elevator muscle. There was contraction of both pupils. The skin was hot and dry, temperature 101.5° F., pulse small and irregular, every ten or twelve pulsations being followed by precipitation of the beats, which then became slower. Heart's action feeble; marked arythmia. Radial arteries atheromatous. The tongue was covered with a dirty white fur, appetite nil. No vomiting at the time of examination. Retraction of the abdomen (*en bateau*); obstinate constipation. Respiration was painful, irregular, 40 a minute, sometimes slow and sometimes quick. Dullness in the supraspinous fossæ, especially on the right side. The same dullness under the right clavicle, with prolonged expiration of a blowing character. Expectoration scanty and purulent. Urine high colored, scanty, albuminous. The patient had subsisted by shelling peas at the central market; her diet had been poor and inadequate; she had been addicted to alcoholic excesses. For four years past had suffered during the winter from colds and coughs all the time; never had hæmoptysis. Nothing worthy of note on the part of ancestry. Eight days ago, on returning from her work, she had a slight chill; this was repeated in five or six hours, with general malaise, prostration, vertigo. Appetite failed; nausea, vomiting and constipation supervened. She was restless nights and had nightmare. Profuse perspiration.

The diagnosis of this case presented some difficulty by reason of the age of the patient and the suddenness of the attack. Was this woman tuberculous? On taking into consideration the signs furnished by auscultation, by percussion, by the expectoration, the emaciation, the fever, the antecedent attacks of bronchitis, it seemed like a chronic case of phthisis, which had not yet made much advance, for the stethoscopic signs were not well marked. In the second place, one might ask if we had not before us a case of typhoid fever or of simple *embarras gastrique* in a tuberculous patient? The state of profound prostration, the contractures, the partial paralysis, pleaded against this supposition, which was abandoned. The woman was a victim of intemperance. Was there here chronic meningitis with recent acute exacerbation, and, perhaps, pachy-meningitis? Many of you thought so, but there was nothing in the history of the case to make this diagnosis very probable. The other hypotheses suggested, acute simple meningitis, cerebro-spinal meningitis, cerebral tumors, tubercles of the cerebrum, did not sufficiently explain the assemblage of symptoms, and were abandoned.

How then were we to interpret the cerebral symptoms in this case?

The diagnosis of tuberculous meningitis, secondary to incipient phthisis, seemed sufficiently to explain all the phenomena observed. On taking into consideration the headache, the initial vomiting, the heat of the head, the contractures, the fever, I judged it to belong to the *inflammatory* form of tuberculous meningitis, which is contrasted with the *torpid* form when the symptoms are slower in their evolution. The march of the affection justified this view. The day of admission I ordered ice to the head, and prescribed a calmative draught containing codeia.

August 18. Somnolence more profound. Morning temperature 102.5° F., evening temperature 102° F.

August 19. Sleep very much agitated during the night. This morning, profound stupor, speech embarrassed and difficult. Morning temperature 101.3° F., evening temperature 101.4° F.

August 20. Through the night the patient was delirious, requiring the strait-jacket. The contracture of the muscles of the back and neck has increased. The patient is quite demented. Complete drooping of the right upper eyelid. Morning temperature 100.8° F., evening temperature 101° F.

August 21. Same general condition. Some strabismus affecting the external rectus of the right eye. Right pupil very much dilated. Morning temperature 100.5° F., evening temperature 100.8° F.

August 22. Respiration difficult, irregular, 46 per minute; pulse small, feeble, irregular, 102 per minute. The patient is plunged into a sort of cataleptic state. If you raise the left arm, it remains elevated ten or more seconds. You can put it in any position, and it continues there for some time.

Death took place on the 23d at 9 a. m. Autopsy made the 25th, in the morning.

Thoracic Cavity.—Dry pleurisy at the summit of the chest. The adhesions were much more pronounced at the right than at the left apex. A number of tubercle granulations in the former situation. There were also a small number of calcified granules in the pulmonary tissue, otherwise healthy. Heart normal, aorta somewhat atheromatous.

Abdominal Cavity.—The liver has the normal appearance. The kidneys are congested; their capsule peels off easily; a few tubercle granulations in the renal parenchyma, near the surface. The spleen and the organs of generation present nothing worthy of note. The mucous membrane of the stomach is mammillated and congested, and presented several ulcers, each the size of a small pea.

Nervous System Encephalon.—In the meshes of the pia mater exists a glutinous exudation, sur-

rounding the circle of Willis and optic chiasm. This exudation, embedding the basal nerves of the right side, extends along the fissure of Sylvius. In the midst of this exudation, fine tubercle granulations are visible to the naked eye. These are especially abundant along the sylvian artery, and in its parietal branches. In separating the convolutions which bound the fissure of Sylvius, a crop of fine tubercle granules is seen in the web of pia mater, covering the island of Reil. This is intimately attached to the underlying tissue of the brain, and is removed with difficulty. No spots of hemorrhage or softening apparent to the naked eye. The tuberculous exudation of the left hemisphere is especially abundant in the region of the ascending frontal convolution near its middle portion. The pons, rachidian bulb, the cerebellum, have their normal appearance. Along the spinal cord, principally on its posterior aspect in the dorsal and lumbar regions, tuberculous exudations of the pia mater are sufficiently abundant, and very adherent to the surface of the cord.

This observation seems to me interesting in more than one respect: 1. As M. Lionville has well pointed out, tuberculous meningitis, in clinical practice, is generally both spinal and cerebral. 2. The distribution of lesions at the base of the brain, their predominance on the left side, well explains the symptoms observed during life; the paralysis of the right levator palpebræ, the contraction of the right arm. 3. It is quite remarkable, despite the contracture of the muscles of the back of the neck, to see that the meningitis had not invaded the cervical region of the cord. 4. The age of the patient is a fact quite exceptional, and which ought to be noted. 5. The slight extent of the pulmonary lesions, which moreover were old, in contrast with the acute recent extensive tuberculous invasion of the encephalon, the spinal cord, and the kidneys, the other organs being healthy, constitutes also an important clinical peculiarity. 6. The etiological antecedents of the disease, our patient having been insufficiently nourished, and addicted to alcoholic excesses, ought also to be noted.

A CLINICAL LECTURE DELIVERED AT THE HOSPITAL OF THE UNIVERSITY OF PENNSYLVANIA.

BY WILLIAM PEPPER, M. D., LL. D.,

Provost of and Professor of Clinical Medicine in the University of Pennsylvania.

Reported by WILLIAM H. MORRISON, M. D.

Obstruction of the Small Intestine—Exophthalmic Goitre.

GENTLEMEN: I shall first ask your attention to this young man, who gives the following history: J. W., age twenty-one, an iron founder. It is stated that, even from infancy, the bowels were obstinately constipated. At the age of two months the bowels were never opened unless a laxative were given, and it required double doses of the ordinary remedies to secure a passage. This continued until he was seventeen months old, when he had an attack of looseness of the bowels, accompanied with the discharge of mucus and blood. At the age of two years, the bowels became more than usually constipated, and this was followed by stercoraceous vomiting. Vomiting of this character continued for seven months, the spells of vomiting recurring on an average about once a month. All this time, the belly was swollen, and he complained of intense colicky pain. After this, the bowels became less constipated; laxatives would act, and the vomiting disappeared. The belly, however, remained large. Gradually the pain disappeared, and for years the bowels were moved once every day, with hard, constipated stools. The belly has occasionally gone down to its natural size, but it never remains small for longer than three months at a time. Notwithstanding this condition, he grew, kept his strength, and was able to go to work in an iron foundry. His appetite is pretty good, and he has always been careful in what he eats, and chews his food well. He has a great deal of wind, which passes freely. The great distension of the abdomen has caused some shortness of breath.

Let us now turn to the physical examination of the patient. The heart pulsates above the line of the nipple in the third interspace, the apex beat being fully two inches higher than usual. There is no murmur over the heart, and there is no cough. The pulmonary resonance is normal all over the chest. The amount of dullness that can be developed over the liver is very slight, the resonance from the distended intestines almost meeting that of the lung. A glance shows you the remarkable figure of this patient. He looks like a man with enormous ascites from cirrhosis of the liver. There is uniform and extreme distension of the abdomen. From the history which has been given, it is evident that this enlargement is not due to the presence of liquid, but to the accumulation of gas in the intestine. He passes large quantities of wind from the bowel, and what is passed is very offensive. The surface of the abdomen is not smooth as it is in ascites, but there are varying curves and depressions, mapping out especially distended portions of the stomach and intestinal canal. The abdominal veins are slightly distended, forming in places little stellar groups, but there is not the great distension of the abdominal venous channels which is seen in cases where the obstruction to the abdominal circulation is as great as comes from cirrhosis or other mechanical obstruction. In the epigastric region the abdomen is remarkably prominent. In the hypogastrium, the distension is much less. On percussion, there is resonance everywhere, but the resonance varies in degree. Over the lower portion of the abdomen, the resonance is high pitched, and has a hardness about as though the intestine, while greatly distended, also contained some fluid or solid material. Over the prominence which occupies the upper zone, the resonance is loud and of great volume. The bowels have been opened once or twice for the past few days, this action having been produced by the medicine which he is now taking. The stools consist of one piece of hardened fæces, about two inches long, and of the thickness of the thumb. He has passed fæces in the shape of balls, but he has never noticed any ribbon-like fæces.

If there were any narrowing at a portion of the bowel which would interfere with the passage of hardened fæces, we should probably find some

evidence of it in the shape of the evacuation. This is to a certain extent a reliable sign of the existence of mechanical obstruction low down in the intestinal canal; and by the term "low down" I would imply a narrowing in the colon or lower part of the ilium, because by the time the fæces have reached the point mentioned, their consistence is such that if they were forced through a constricted portion of intestine they would probably retain the shape given to them. Mechanical obstruction high up in the small intestine will not reveal itself in the shape of the fæces, because at this point they are liquid or semi-liquid in consistence, and there may be a very close obstruction, requiring that the contents of the bowel be extremely liquid before they can pass, and yet the stools give no sign of its existence.

It must be admitted that in this case the stools afford no evidence of the existence of mechanical obstruction; and if such obstruction is present, we may exclude the idea of its being low down in the intestinal tract, and infer that it must be high up in the ilium or jejunum.

The common lesions of the intestinal mucous membrane, such as ulceration and the like, which give rise to the narrowing of the bowels and consequent mechanical obstruction, are far more common in the colon and the lower portion of the ilium than in the higher bowel. The lesions of dysentery, and those of severe ulcerative enterocolitis, the common form of grave summer complaint in children, are of course more marked in the colon and ilium than in the jejunum, and therefore if the contraction follow the cicatrization of an ulcer, it is most likely to be in the lower part of the bowel.

We cannot very well determine from the shape of the abdomen, the situation of a mechanical obstruction, supposing one to exist. The extreme distension obliterates the usual landmarks, and the dilated bowel thrusts itself over the viscera, preventing us from recognizing which portion of the intestinal canal presents. At first glance we might think, from the immense size of the epigastrium, that the stomach was in a state of gigantic enlargement and dilatation; but this appearance is very deceptive, and as I am speaking, you have an illustration of what I am saying. You see as the wave of peristaltic motion passes over the abdomen, that this prominence is divided by a deep sulcus, which is quite a different appearance from what we should expect if this were one large cavity. This is probably an immensely distended coil of intestine, but it is impossible for me to say whether or not any portion of this prominence is made up by the stomach. The only way in which this could be determined would be by a careful catheterization of the stomach—see how far an olive-shaped bougie will pass, and then measure the distance externally; and by injecting warm water and noting its capacity, washing it out and seeing what effect this has upon the distension.

(*To be continued.*)

—A physician called to attend a sick person in Reading, Pa., recently reported that the house containing four rooms, was occupied by "seventeen persons and eight dogs."

MEDICAL SOCIETIES.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

The Bacillus Tuberculosis and the Etiology of Tuberculosis. Is Consumption Contagious?

BY H. F. FORMAD, B. M., M. D.

(*Continued from page* 297.)

Koch asserts that the structural peculiarities of the tissues which I described can have no etiological relation to tuberculosis, because an animal not possessed of such tissue peculiarity—the cat—is easily inoculable by tuberculous material. Here I must differ from Koch, as in my experience with cats this is not the case; and, again, Koch brings no proof for his assertion, and I am unaware that he, or anybody else, produced tuberculosis in a cat, except by inoculation into some serous cavity. That inoculations into serous membranes prove nothing for tuberculosis, as I have shown conclusively, Koch still seems to fail to see. But here is a way in which cats may become tuberculous, with or without the bacillus. In one instance, we kept one of the cats in a close box, *deprived* of liberty, good air, the comforts of life, motion and sufficient food; she also had been inoculated with diphtheritic material eight months previously, but had recovered. After the lapse of a year, the cat was set free; but was accidentally killed, and was found to be affected by general tuberculosis in a high degree.

This, in my opinion, corresponds fully to the conditions in which a healthy young woman is placed, and finally becomes scrofulous, and then tuberculous, from a simple cold, after being the faithful nurse for a couple of years of a consumptive husband.

On the other hand, there is full reason to believe, as it is in accordance with experience, that young scrofulous persons, under proper conditions, may become normal individuals; *i. e.*, lose or outgrow the predisposition to tuberculosis. (I have dwelt upon this in my first communication on this subject.)

The scrofulous habit, and consequently also phthisis, may skip a generation, and does not invariably embrace all members of a family. It has been observed that parents may have at first healthy children without any vice, who grow old well; and subsequently the same parents, without being phthisical (but perhaps otherwise becoming deficient in health), may have other children that exhibit a full scrofulous habit. But even the reverse has been observed.

It would be highly desirable if physiologists would furnish some experimental observations on the circulation of the plasma in the lymph-spaces. This is, to my mind, a circulation or movement of vital juices in the tissues, which, for the well-to-do of the individual, is of importance next to that of the blood. These important channels, the lymph-spaces, are known to regulate the blood-pressure, carry and breed (white blood corpuscles) food for the tissues, lubricate tissues, and relieve the body, if any of its parts are damaged by injury of any character, of inflammatory exudates, dropsy, etc. These channels are nearly blocked up, nearly useless in the *scrofulous*, and hence cannot perform their functions; and thus modify

materially the condition and the fate of the individual, in case of disease.

The term "*scrofulous*," which I retained for describing the above-stated anatomical peculiarity of animals and individuals, is as good as any other term; moreover, it is known by all as designating the "predisposition" to tuberculosis. Scrofulosis should be called a *condition* and not a disease, as it has its (a natural) hereditary and widely-distributed type in man, and its homologue in some normal animals (rabbit, guinea-pig, etc.). It must be remembered that the scrofulous individual acquires certain lesions, such as enlargements of the lymphatic glands, cold abscesses, caries, long standing catarrhs of various kinds, skin eruptions, and certain deformities of bones, only under the influence of injurios, or of the same agencies which, in the non-scrofulous individual, lead to transient and curable affections.

Virchow designates simple, permanent enlargement (hyperplasia) of lymphatic glands, with or without cheesy change, "scrofulous" in contradistinction to "tuberculous" lymphatic glands, which contain miliary tubercle nodes (heteroplasia), and which also undergo cheesy change.

There is nothing called "scrofulous" or "scrofulosis," which by others is not also called "tubercle" or "tuberculosis." There are, strictly speaking, no scrofulous products, but only tuberculous products. The traditional term "scrofulosis" is variously used and interpreted, although it is not evident that any one means by it anything anatomically well defined.

Others take matters easier, calling everything *tuberculous* that contains tubercle bacilli, and calling scrofulous all cheesy matters in which bacilli are absent.

There is still a third aspect of this question, viz., the parasitic or bacillary theory of the predisposition to tuberculosis. As I mentioned in the earlier part of this paper, Baumgarten, Marchant, and several others, recently brought forward that not only tuberculosis, but that even the predisposition to tuberculosis is to be explained by the susceptibility of an individual to bacilli! Under this hypothesis, the scrofulous tendency in individuals is created through the mediation of the bacilli. It is supposed that the bacilli or their spores may be conveyed to the ovum by the organization of the mother, or in utero by the spermatozoids of the father. Furthermore, they say, inheritance is to be explained in no other way than by a bacillary infection of the infant through the milk of the nursing mother, and by subsequent living together of children and phthisical parents. We may exclude such view altogether from consideration, as it has not been proven. Besides, it is not in accordance with facts from observation. It is as contrary to biological laws to accuse parasites for the transmission of a predisposition to tuberculosis, as it would be for that of epilepsy, etc. Hence, we may dispose of such view as an unfounded, absurd hypothesis.

I am not opposed to the germ-theory of disease, where it has its well-founded and proper application. Bacteridian studies have contributed largely to our knowledge of a certain class of pathological processes and lesions. But misinterpretations of the significance of bacteria; bacillary speculations, without occasion for them and without any proper application to the subject, are a check to the progress of medical science. The question of the predisposition to, and the cause of, tuberculosis, demands a great deal more of solid pathologico-anatomical and experimental studies; it can, by no means, be regarded as settled, and least of all through the discovery of a bacillus inhabiting necrotic tubercular tissues.

3. Tuberculosis, without Predispositions, Due to Inflammation of Serous Membranes.

For some years I felt much interested in the question whether or not simple inflammation of serous membranes could lead to tuberculosis in the non-scrofulous, that is, in persons which have no family history of tubercular disease; and I would like to ask the opinion and experience of the members of the Society upon this question. It is well known that there may be primary tuberculosis of serous membranes, producing secondary inflammations; and, on the other hand, tuberculosis secondary to adhesive pleurisy or peritonitis is also common in serous membranes. The general belief, however, is that whenever tubercular disease in either case occurs, if not secondary to phthisis or tubercular disease elsewhere, a strumous or scrofulous condition is required.

Traumatic injuries of joints are known to lead often to fungoid (tubercular) synovitis and general tuberculosis, occasionally in individuals with good family history. Simple injuries of the eyeball (the anterior chamber as well as joints is lined by serous membranes), under conditions as above stated, have also been known to lead to tuberculosis, as recorded by Wolfe (*Brit. Med. Jour.*, March, 1882); Gradenigo (*Annale d' Oculistique*, 1870).

Dr. M. Litten,* of Berlin, was the first to publish some accounts which demonstrate that miliary tuberculosis may be caused directly and primarily by pleurisy and inflammaton of other serous membranes in persons with no phthisical history, and without any cheesy masses being formed in any part of the body. In his (Litten's) experience this was particularly the case when there was a rapid reabsorption of the exudates in case of chronic pleurisy, or if repeated removal of the fluid of a hydrothorax or ascites by tapping has been performed. He records several well-studied cases of that kind, accompanied by autopsy records. Litten's observations at no time, however, received their well-deserved attention.

Not only clinically, but also pathologically, this part of the tuberculosis question is rather neglected. In text-books of pathology the occurrence of primary tubercle in adhesive bands is incidentally mentioned, but no special consideration is devoted to its etiology and manifestations.

Upon the autopsy table I have repeatedly met with subjects with exquisite primary tubercular peritonitis, pleurisy or pericarditis, which, upon

*M. Litten, Sammlung Klin. Vortrage, No. 119. Ueber acute Miliartuberculose, 1877. For further references see Wiener Med. Presse, No. 36, 1882 Charité Annalen, vol vii., Berlin; Krankheiten der Respirations-Organe, in Virchow's Handb. der Spec. Path. und Ther., vol. i.; Virchow, Geschwulste, vol. ii., p. 725, etc.; also, Formad, Transactions of the Philadelphia County Medical Society, and of the Pathological Society, for 1882-83.

inquiry into the history of the cases, failed to reveal any phthisical or scrofulous history. The products of these inflammations were often plastic in character, not unlike those of fungoid synovitis. The appearances sometimes present themselves particularly strikingly in the peritoneum; all the viscera may be glued together by plastic material into a solid mass. The omentum is usually retracted and matted together into a solid cord or mass, which, lying parallel with the transverse colon, reaches across the abdominal cavity, and may have a thickness of from two to four inches; the mesenteric and other lymphatic glands are usually normal, but sometimes in advanced cases may be much enlarged, and more or less cheesy. The perfect absence of any cheesy focus in the body is, however, often a conspicuous feature in these cases.

Some pathologists deny the tubercular nature of these formations, and of the flat nodular masses which cover the serous surfaces in these cases. It is true that fibroid changes predominate in these formations; but numerous tubercle nodules, with all the necessary attributes, epithelioid and giant cells, and necrotic changes, were plainly seen in all cases which I had occasion to examine. Secondary miliary tubercles of quite recent date are also found thickly strewed locally in these parts, and may or may not be seen in the lungs and other organs. As a rule, there is more or less ascites in these cases. My colleague, Dr. E. O. Shakespeare, has recorded similar cases, and Dr. Morris Longstreth tells me also that he had seen and studied such cases. Dr. Mitchell Prudden describes (*New York Med. Record*, June 16, 1883,) an allied case.

In chronic adhesive pleurisy there occur similar primary tubercular formations in the organized plastic exudate, which in some cases gives rise to secondary (miliary) tuberculosis of other organs. The lungs may be perfectly normal in all parts, and show only peripherally, just below or bordering the pleura, some indurations of gray color made up of recent tubercle tissue. These young tubercle infiltrations are in some cases seen to have penetrated into the substance of the lung, like in a pleuro- or dissecting-pneumonia, directly from the old tubercular masses of the adjacent pleural membrane.

I have also examined several cases of plastic adhesive pericarditis, and found the plastic vegetations in this lesion to contain tubercles; two of these had coincident pleuritic lesions.

Cases which came under my observation during the last eighteen months—*i. e.*, since the opening of the bacillary campaign—were, of course, carefully examined for bacilli, and the results may be summarized as follows: bacilli were found in most of the lesions, if the tubercular disease of serous membranes was accompanied by cavities and cheesy masses in the lung, or by tubercular ulceration of the intestines, and if cheesy changes in general were prominent; but no bacilli could be discovered, even after repeated and careful search, in any of the lesions of four cases of primary peritoneal and pleuritic tuberculosis examined. In none of these latter four cases were there any conspicuous cheesy changes in any organ, and no cavities or marked hepatizations in the lung, and no intestinal ulcers, although in two there was slight pulmonary miliary tuberculosis. These cases will be recorded in detail in a future publication.

I have also seen several cases of primary tubercular pleurisy and pericarditis, and a few of primary tubercular peritonitis, in the pathological institutes of Virchow in Berlin, and of von Recklinghausen in Strassburg. I questioned these foremost men of pathology concerning the etiology of these lesions. They, as well as Rindfleisch, of Würzburg, told me personally their opinion, stating their firm belief that these lesions often directly originated from simple chronic inflammatory changes, without the agency of any cheesy focus, or any specific agencies whatsoever.

Birch-Hirschfeld also states, in his classical pathological work (page 183), that "nearly every exudative pericarditis, and pleurisy leads to a local tuberculosis, if it takes a chronic course."

How often primary tubercular lesions of serous membranes occur in non-scrofulous persons, and whether this is the only form of tuberculosis in this class of persons, is, of course, a matter of speculation, until thorough statistics and careful studies are made in this direction. Nevertheless, it is a demonstrated fact, as I will show further on, that primary tuberculosis can be produced in the peritoneum of animals, like the dog, which are proved not to have any scrofulous tendency. I have seen this myself, and have seen O. C. Robinson, in my laboratory, succeed in this experiment, by the introduction of simple irritants into the peritoneal cavity. Koch also never succeeded, even with the bacillus, in producing tuberculosis in the dog, except when using the peritoneal cavity or the anterior chamber of the eye (which is also a serous sac) as a point for inoculation.

Here is room for hypothesis. I would prefer to believe that tuberculosis could occur only in scrofulous persons, as this would better agree with the *scrofulous anatomy*. It is, however, possible that a scrofulous anatomy of the tissues may be artificially established by the blocking up of the lymph-spaces of the serous membranes, by fibrine and molecular *débris*, suspended in the serum, which is being reabsorbed. This would then be a mechanical process, and not one of infection. If an inflammation occur in serous membranes, resolution becomes difficult through the peculiarity of the exudate. This is fibrinous mainly, and forming extensive, usually permanent organized deposits, it impairs the function of serous surfaces quite materially; the reabsorption of new exudates is probably sometimes entirely impossible. Thus conditions may possibly be created in serous membranes, not unlike those of scrofulous tissues; and simple irritants, perhaps the fibrine, may induce in them a similar reaction.

4. Question of Contagiousness. Clinical Aspects.

The idea of the contagiousness of tuberculosis is not new, and, like other unfounded views in medicine, it has oscillated, like all fashions will, from one extreme to another for many generations. At present it is entertained by a number of scientists, and by a part of the profession. This view has called forth, from time to time, a number of researches whose results were either pro or contra. I will refer to these subsequently.

Of late, it appears that the belief in the con-

tagiousness of tuberculosis has won considerable ground, not so much on account of accurate observation as on account of Koch's discovery of the bacillus tuberculosis.

Another element, which seems to have had an influence in this direction, is the fact that certain experimenters, formerly believing, from their own experiments, that tuberculosis was non-contagious, were led, later on, to change their opinions on account of the results of subsequent experiments. These latter experiments will, however, be shown not to be conclusive.

Before discussing the merits of the bacillus question, I would like first to consider the question of contagiousness from clinical grounds; and should it be proven that tuberculosis is not contagious, then the necessity for a contagium surely falls to the ground.

According to the observations of the most prominent clinicians who have paid special attention to this matter, there is not a single authenticated case of tuberculosis as a result of contagium on record. Among scores of experienced men who deny thus the contagiousness of tuberculosis, it is sufficient to mention the names of Virchow, v. Reclinghausen, Stricker, in Germany; Gull, Williams, Watson, Paget, Humphrey, Richardson, in England; Bennet, in France; and Hiram Corson and Traill Green, in our own midst—all men of close observation, with ripe experiences reaching over thirty to fifty years.

The statistics of the large Brompton Hospital for Consumptives, for thirty-six years, with regard to the resident officials, compiled by Dr. F. Williams (quoted after the *Lancet*, 1883), shows that of four resident medical officers, one of whom had served twenty-five years, none had any lung disease; of six matrons, none were consumptive; of 150 resident clinical assistants, eight became consumptive, and five died, but in only one was the disease developed during residence at the hospital. Since 1867, of 101 nurses, only one died from phthisis, and that after leaving the hospital. Before 1867, six died, three of these of phthisis, but only one became so whilst resident, and she had a consumptive sister. She died thirteen years after first joining the hospital, but was not there the whole time. Of thirty-two gallery maids since 1867, none developed phthisis whilst at the hospital. Of twenty house-porters, five died, but none of consumption. Non-residents:—Of nine secretaries, three were threatened with lung disease, but recovered. Of twenty-two dispensers, seven died, three of phthisis, one while at the hospital. Of four chaplains, three died, none of phthisis. Of twenty-nine physicians and assistant physicians, eight died, none of phthisis. At the Chest Hospital, Victoria Park, there have been five resident medical officers during about the last fifteen years; all are alive and well. Two matrons, neither consumptive. There were two clinical assistants appointed every three months: none known to have developed the disease at the hospital. One nurse out of fifty or sixty in the last few years became consumptive while at the hospital, and she died after a year's illness.

An ingenious plan to decide the question of the communicability of phthisis was instituted by the British Medical Association by establishing the Collective Investigating Committee. This committee sent out questions relating to this subject to all the members of the Society. Of 1028 replies received, 673 negatived the idea of a contagium, while 261 replies favored it. According to these statistics, there is a manifest majority in favor of the non-contagiousness of phthisis; yet such a plan is unsatisfactory, as the answers may be of unequal value, as their worth must be estimated in proportion to the experience and authority of the sender.

Not without interest is the observation of Prof. Corradi, of Pavia, who noted that out of 133 families in which he had cases of consumptives, in only twenty-five of the families were there more than one member of the family ill of that affection.

There is no proof whatever that tuberculosis is conveyed from person to person by contagion. Seeming exceptions to this assertion can almost always be accounted for in some other way.

The assertion that the wife may contract the disease from the husband, I have pointed out in a former paper to be untenable; and I have also indicated that a predisposition to scrofulosis may be acquired from the unwholesome mode of life led, of necessity, by such individuals. Besides, it is established statistically that nearly one-third of all deaths occurring in middle life are due to phthisis. In view of the frequency with which this malady occurs, intermarriage between scrofulous individuals may be almost as common as between non-scrofulous ones.

The view taken that children become scrofulous by contagion from phthisical parents, may be met by the fact that instances have occurred where a number of young children of phthisical parents were early removed from their homes and distributed among healthy families, and yet all, sooner or later, became phthisical.

Healthy persons have even been fed on bovine tuberculous material (which is considered identical with human tuberculous material) and have thrived on it, as is proven by the interesting feeding experiments made upon man and recorded by Schottelius (Virchow's Archives, No. 91, 1883). The circumstances which led to this experiment were as follows: In Würzburg, the sale of meat affected by pearl disease or bovine tuberculosis is permitted, but, as some opposition to the sale once arose, a community of country people agreed to use exclusively tuberculous meat, on account of its cheapness, and in order to prove that it was harmless. From October 1867, to November, 1868, forty-nine tuberculous beeves, with well-pronounced lesions, were consumed by these people while they were under the supervision of the district physicians. In many instances the meat was even eaten raw in consequence of habit. Ever since then, those people have continued the use of tuberculous meat, and thus far no bad results have been noticed; in fact, the record says that the people referred to are unusually healthy.

—Dr. Dehenne writes in *L'Union Médicale* on the surgical treatment of interstitial keratitis. He recommends the performance of an iridectomy. Iridectomy, he avows, cures the disease in some days, and consequently confers immense benefit on the patient.

EDITORIAL DEPARTMENT.

PERISCOPE.

The Etiology, Pathogenesis, Treatment and Prophylaxis of Pulmonary Tuberculosis.

The *London Med. Record*, February 15, 1884, tells us that Prof. Sormani contributes an important and interesting article to the *Annali Universali di Medicina*, September, 1883, under the above title. The numerous observations now recorded in many countries confirm the importance of the discovery of Koch, of the bacillus of tuberculosis, in diagnosis and prognosis. The presence of the bacillus in the sputa, pus, and other secretions, and in the tissues and organs, is a certain indication of the tubercular process, and is sufficient to establish its diagnosis. The absence of the bacillus in the excretions, if repeatedly confirmed, with rare exceptions only, renders it certain that the affection is not tubercular. If the bacilli be abundant, long, sporigenous, and in groups, there is an active proliferation of the micro-organism, and the disease will probably run a severe and rapid course. For the microscopic examination of the bacilli the author prefers Ehrlich's method, modified by Weigert. A thin layer of sputum, spread on a cover glass, is dried over the flame of a spirit lamp, and then immersed in the solution of gentian-violet (Weigert's formula: gentian-violet, 1.5 parts, dissolve in 15 parts of absolute alcohol, add 3 parts of oil of aniline, and dissolve in 100 parts of distilled water.) It should remain in this solution for fifteen or twenty minutes, or longer; it is then rapidly passed into dilute nitric acid (50 per 100), then into alcohol, and then into a weak aqueous solution of vesuvine, and, lastly, well washed in absolute alcohol. The preparation may be mounted in oil of cloves, castor oil, or dammar varnish. Sections require three or four hours to take the color, and should generally be allowed to remain twenty-four hours.

Prof. Sormani has made many experiments on the inoculation of animals with tubercular matter. The results of these experiments are published in the *Rendiconti del R. Instituto Lombardo*, July, 1883. Inoculation with sputa containing bacilli gives rise to tuberculosis, which is developed more rapidly when the bacilli are abundant. The inoculated bacillus multiplies in the organism, and invades the lymphatic system, liver, spleen, and serous membranes; by its presence it sets up a chronic inflammatory process, with formation of products which become casefied, and subsequently soften, producing gradual destruction of the organs. The bacillus is found in the centre of the tubercles in their earliest stage of formation, and hence is the cause and not the effect of the morbid process. The lymphatic vessels, amœboid cells, and the blood-current, are the means by which these micro-organisms are transported from one organ to another and diffused throughout the body. Koch's discovery gives us a new indication as to treatment. It is reasonable to suppose that a substance may be found which, while innocuous to the individual and to the function of the diseased organ, may act on the bacillus or its substratum, and so arrest its proliferation.

Recent studies on the artificial culture of morbigenic germs and other micro-organisms, show that these organisms are very capricious, and that it is sufficient to modify very slightly the cultivating menstruum to arrest their proliferation. In the artificial cultivation of the aspergillus niger, an infinitesimal trace of nitrate of silver renders impossible the vegetation of this microscopic fungus (Duclaux, *Ferments et Maladies*). The problem is to find some substance which, while harmless to the system at large, may yet prevent the growth of the tubercle-bacillus. Many antiseptics have been tried to this end. The fumes of sulphurous or nitrous acid are fatal to the bacillus, but are not respirable. Corrosive sublimate in a solution of 2 per 1,000 does not destroy the bacillus (Vallin).

Iodoform has been tried in many ways. The author gives it internally in the dose of 50 centigrammes daily, and by inhalation in the following manner: A Woulff's bottle with two necks is taken; into one neck is inserted a glass tube, which reaches nearly to the bottom of the bottle; into the other a short tube is placed, which is connected with an India-rubber tube, having at the other end a respiratory mask; to the longer tube is fastened a cylinder containing compressed air (Waldenburg's apparatus. *Die Pneumatische Behandlung:* Berlin, 1876). In the bottle is placed about 50 grammes of iodoform, previously finely powdered, with the addition of a little ether. When the apparatus is used, the compressed air passes through the Woulff's bottle, and the strong current of air takes up a part of the iodoform and carries it into the lungs. To facilitate the volatilization of the iodoform, the bottle may be placed in water and heated up to 100° (decomposition of the iodoform only takes place at 120°). The greater part of the iodoform inhaled is arrested in the bronchial tubes, but in animals some reaches the alveoli themselves. At first one only of Waldenburg's cylinders a day was used; the number was gradually increased to ten. The iodoform was never irritating; it was absorbed, and could be recognized in the urine by nitric acid and sulphide of carbon. After about a month of this treatment, the patients had notably improved; fever and night-sweat had disappeared; and the cough and expectorations were much diminished. In three months they had gained from 5 to 12 kilogrammes in weight, but the bacilli had not entirely disappeared from the expectoration. The great diminution of the expectoration, however, proved that the proliferation of the micro-organism was much less active. The local mischief was arrested; the vital capacity of the lung was rather diminished than increased; and this is in harmony with the fact that cicatrization is taking the place of the destructive process.

Koch's process to prepare the gelatine for the artificial cultivation of the bacilli takes a week or

more. Dr. Sormani finds that it can be quite as well and much more quickly obtained by heating in a water-bath calf-serum previously filtered and rendered alkaline by the addition of crystallized carbonate of soda. His best cultivations were made with this gelatine in watch-glasses, soldered together with mastic and silicate of potash. Out of sixty attempts, in six only were developed the little greyish-white, sometimes yellowish, patches described by Koch; these patches contained very numerous oval spores, united in zooglœa, and immovable, of uniform size, the greatest diameter being one micro-millimetre. On the addition of a liquid, the peripheral spores become detached, and acquire a vivacious oscillatory movement. Later appear very fine transparent oscillating bacteria, two to seven micro-millimetres long, or even more, articulated, granular, and, like the spores, strongly coloring with gentian violet. Among the spores and bacilli, numerous crystals of chloride of sodium and carbonate of soda were visible. The uncertainty still existing as to the value of the spores and bacilli obtained as the products of cultivation, and the great tendency of these cultivations to fail, render it premature to decide on the efficacy of the various therapeutic agents from the negative results only obtained by artificial cultivation.

Dr. Sormani agrees with Marchiafava that the bacillus is not found in the breath of the phthisical. The bacillus is preserved unaltered in the expectoration for a very long time, and resists putrefaction and desiccation, and preserves its virulence. Tuberculosis is not directly contagious, but indirectly it is, by means of the dried, powdered tubercular sputa which float about as dust in the air.

In the prophylaxis of tuberculosis, the prompt destruction of tubercular sputa, and the efficacious disinfection of the rooms and objects soiled by tubercular matter, must be chiefly insisted on.

A Clinical Observation in Support of the Theory of the Contagiousness of Pulmonary Consumption.

Dr. Frank Ogston thus writes in the *Brit. Med. Jour.*, February 2, 1884:

From all that could be learned of the family history of Mr. and Mrs. G., no suspicion of an hereditary tendency to consumption could be traced; on the contrary, both his and her forefathers had been noted as being healthy and long-lived, and they themselves, at the ages of fifty-seven and fifty-five respectively, are quite hale and strong. Their family consisted of six sons and two daughters, between the ages of thirty-one and twelve; and they had been strong and healthy children, with no apparent tendency to disease.

About three years ago, the third son (George) caught cold, as it was said, and came from his home in Glasgow, where he was living with his wife, to be nursed in his father's house in Aberdeen. He was examined by a medical man in town, who stated that he was suffering from pulmonary consumption; and he died about two months afterwards. The accounts of his illness leave no doubt that the disease was correctly diagnosed, and that it had run its usual course.

There is an obscure history that some of the members of George's wife's family had died of consumption; but she had none of the symptoms of it, and was quite well when last heard of.

George had been nursed by his sisters, Kate, aged then about twenty-one, unmarried, and Mrs. B., aged eighteen, since married, who, it is stated, were then both stout, healthy girls.

The first month after George returned to his father's house, a younger brother (Charles), aged fourteen, slept in the same bed with him, but afterwards, for convenience of nursing, went into another room.

Shortly before George's death, Kate began to lose color and flesh; but little notice was taken of her, as it was ascribed to fatigue and grief for her brother.

In July, 1882, I was called to see Mrs. B., who had been married a few months previously, and who occupied, with her husband, part of the same house with her parents. I found consolidation of the right apex, and a larger patch of consolidation in the left apex, which had just commenced to break down. She had an anæmic appearance, but was fairly plump. Her forenoon temperature was generally about 100°, but she had no night-sweats. The paroxysmal cough was the chief source of complaint. The disease progressed rapidly, in spite of cod-liver oil emulsion, Coghill's inhaler, etc.; and, in November, she died in a few minutes from an attack of hæmoptysis. She had become rapidly emaciated, and both lungs were extensively broken down. The sputa, which had become abundant, swarmed with bacilli.

During Mrs. B.'s illness, my attention was called to her sister Kate, who was nursing her, and I found in her also apical consolidation to a slight extent, with rapid pulse and an anæmic appearance. She had no cough at that time, and seemed to improve when ordered hæmatonics and separation from her sister.

During the same summer, a boy came to my house from time to time, complaining much of shortness of breath and weakness. On examining his chest, I found a suspicious dullness at the left apex. I gave him quinine and iron tonics, and he improved for a time. I did not see him for a few months; but one day I found him in Mr. G.'s house, when I discovered that he was one of the family—in fact, Charles, aged now nearly seventeen.

From time to time I visited Kate and Charles, who became gradually worse; and in a few months they died, with all the symptoms of phthisis, within a few days of each other.

There now remain four sons: the eldest, a tailor's cutter, is married, and has two strong and healthy boys; the second, a saddler, is the picture of vigorous manhood; the third, a sailor, who came in point of age between George and Kate, is a strong and vigorous man, who has come through many hardships, having been several times wrecked: "on one occasion, he was in an open boat on the Atlantic for fifteen hours, with no clothing but his night-dress, and then three days with only a suit of oil-skins above the night-dress" (a brother's statement); and the youngest, a boy now of fifteen years, is a draper's apprentice, and is strong and healthy.

Here, then, we have a man suffering from consumption brought into a healthy household, in-

fecting first a brother, who slept with him, and then his sisters, who were engaged nursing him; while his four remaining brothers, who came little into contact with him, escaped. The presumption of contagion seems strong.

Note on the Treatment of Eczema Marginatum, and of Ringworm in General.

Dr. R. W. Taylor thus writes in the *Jour. Cut. and Ven. Diseases*, February, 1884:

I have always placed much confidence in the parasiticide virtues of bichloride of mercury in the treatment of the various forms of ringworm, and have generally used it in alcoholic solution, being in accord with Cavafy in the opinion that, thus used, its efficacy is much enhanced. Even thus combined, its action is not always certain, particularly in cases of eczema marginatum. This fact was very forcibly brought to my mind in the treatment of the case of a young lady during the past summer. She had this affection, severely involving the integument of the hypogastric, pubic, crural, and gluteal regions. The diagnosis was confirmed by the discovery of the parasite in the scales, but the appearances of the eruption were thoroughly typical. I ordered a two-grain solution of the bichloride of mercury in one ounce of alcohol, which was used for about a week, when I increased the strength to four grains, as the progress was not satisfactory. Though the parts were carefully sopped with this solution three or four times a day, and care was taken that the underclothes should be frequently changed, the rings of eruption advanced, in many parts being preceded by outlying papules. The pruritus was only relieved for a limited period after each application. In this state of affairs, it occurred to me that, if I could find some vehicle by which the parasiticide could be kept continually over the morbid surfaces, and not be rubbed off, I could soon effect a cure. It happened one day when the progress of the case was thus at a stand-still, that I had on my office-table a bottle of tincture of myrrh. The thought occurred to me that, if the liquid was painted over the surface, a very thin, flexible layer of gum resin would be left which would retain the bichloride of mercury in contact with the skin. I, therefore, first thoroughly bathed the parts with a four-grain-to-the-ounce alcoholic solution of the bichloride, and, when dry, painted the whole surface with the tincture of myrrh. The lady reported, the next day, that she was much better, and had not scratched very much since the application. I then gave her a prescription containing four grains of the bichloride to the ounce of tincture of myrrh, with directions to thoroughly paint the parts twice daily. The effect was simply wonderful. In a few days, the patches and rings became less rigid, the papules less salient, the pruritus was relieved, and, within a fortnight, the disease was wholly cured. I have since used the simple and compound tinctures of benzoin in the same way, and find that they are equally as valuable in affording a vehicle for the parasiticide and a protective film to the integument. The discomfort of the application of these tinctures is very slight; patients simply complain of a little drawing or tight sensation of the parts, for a few moments after the application—inconveniences which are more than counterbalanced by the relief of the pruritus. I have thus far used this method in three cases of eczema marginatum and two of tinea tonsurans capitis; in all with most excellent results, namely, a prompt and perfect cure. Whether the gum resins have any therapeutic effect, I am unable to say. I think that these tinctures can be still further used with benefit as a vehicle for other agents in the treatment of skin affections.

A Ready Method for the Detection of the Bacillus Tuberculosis.

Dr. M. B. Hartzell thus writes in the *Med. Times*, January 26, 1884:

Since Koch first announced the discovery of the bacillus tuberculosis, methods for its detection have multiplied rapidly. Most of these methods, however, are more or less complicated, are uncertain, and require too much time for their execution to be of use clinically.

On account of its simplicity, and of the short time required to execute it, I wish to add another to the many staining processes already in use. This process appears to me to possess decided advantages over all others with which I am acquainted; by means of it the sputa of patients who are supposed to be tuberculous can be easily and rapidly examined, and the bacilli are so deeply stained that if any are present in the specimen under examination they cannot be overlooked, if ordinary care is used. The process is briefly as follows: A small quantity of sputum is spread as thinly and evenly as possible upon an ordinary glass slide; it is allowed to dry, which takes but a minute or two, and is then passed slowly several times through the flame of an alcohol lamp or Bunsen burner. One or two drops of the fuchsin solution, recommended by Gradle, and prepared as follows—carbolic acid, ♏xv; distilled water, f. ℥ ss; dissolve, and add saturated alcoholic solution of fuchsin, f. ℥ ss—are placed upon the sputum thus prepared, and allowed to remain from three to five minutes. The slide is now washed thoroughly with distilled water, to remove the excess of fuchsin, and the stained sputum completely decolorized by means of a saturated solution of oxalic acid. It is again thoroughly washed in the distilled water after the decolorization, and allowed to dry. It is now ready to be mounted in glycerin or balsam for examination. With a power of five hundred or six hundred diameters, the bacilli will appear as brilliant red rods, no staining of the background being necessary.

In all other methods with which I am familiar, the decolorizing agent employed is dilute nitric acid; but this, besides being disagreeable to handle because of its corrosive and staining properties, is apt to remove the color from the bacilli too, unless great care is taken. Oxalic acid, however, seems to leave the dye untouched in them.

To render the process still clearer, the different steps may be arranged thus:

1. Spread the sputum upon the slide, dry, and pass through the flame of the lamp.

2. Stain with the fuchsin solution three to five minutes.

3. Wash in distilled water.
4. Decolorize with oxalic acid.
5. Wash again thoroughly in distilled water, dry, and mount in glycerin or balsam.

Bleeding in Delirium Tremens.

Dr. E. J. Kempf reports this case in the *Louisville Med. News*, March 8, 1884:

M., a merchant of the village, called at my office one morning before daybreak, and aroused me. He was in a desperate plight, hatless and coatless; with bloodshot eyes and inflamed eyelids, trembling hands, and a nervous condition of the body. He told me candidly that he had been drinking greatly to excess for the last six weeks, that he had not slept a wink nor eaten a bite for the last sixty hours, and that he felt as if he were either getting crazy or getting the fits.

The patient was a stout, well-built, corpulent man; a high liver, one who had drunk intoxicating liquors more or less all his life. On account of business cares he had lately lost all control over himself, and been, as he himself expressed it, drunk for the last six weeks. I persuaded him to return home, and prescribed rest, small doses of stimulants, liquid, nutritious diet in small quantities, large doses of bromide of potassium and hydrate of chloral alternated, and saline purgation.

The next morning I found the patient somewhat calmer, but with a full, bounding pulse, and temperature of 102° F. His head ached and felt dull, and he seemed apprehensive of some calamity or mishap. He had slept about an hour during the night at broken intervals; he had been bothered very much by dreams and "foolish thoughts." His bowels had moved freely, the fæces being watery, blackish and fœtid. I advised bleeding, to which the patient readily consented. I accordingly opened a vein in his right forearm, and let blood flow to the amount of fully three pints, when the patient, who was sitting on a chair with a cane supporting his arm, fell from the chair to the floor in a faint. Large drops of perspiration stood on his forehead, and his skin had a cold, clammy feeling; his pulse was now very feeble. We put the patient to bed, and covered him with quilts, and in a short time he rallied. I now ordered absolute rest, milk frequently and in small quantities, and one-eighth grain of morphine every five hours. The patient was in his store two days afterward, asserting that he was entirely well. The marked benefit derived from the bleeding in this case induced me to make a report of it.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——Dr. H. F. Hendrix, of St. Louis, in a reprint before us, describes a remarkable case of arrest of development caused by intra-uterine pressure. He considers that the history of this case will go far to substantiate the theory that most congenital deformities and monstrosities are to be accounted for by the position which the fœtus occupies in the uterus, and the scarcity of amniotic fluid, in consequence of which the walls of the uterus are allowed to come too forcibly in contact with the embryo, causing it to retain almost any shape which it may accidentally assume.

——A careful report of a case of extirpation of the ovaries by the Battey-Tait operation is given in a reprint from the Denver *Medical Times*, by Dr. Thomas H. Hawkins.

BOOK NOTICES.

Medical Education and the Regulation of the Practice of Medicine in the United States and Canada. By the Illinois State Board of Health. Pp. 270. Chicago: W. T. Keener, 1884.

The publication of this volume will be a public benefit. It was prepared by the Illinois State Board of Health for the fifth annual report of the Board, and has been revised, corrected, and extended for this separate issue.

It contains the laws regulating the practice of medicine in the various States; a list of medical institutions in this country, both those extinct and yet existing; a list of medical colleges, with their course of instruction, fees, number of students, percentage of graduates to matriculants, etc.; auxiliary and post-graduate schools; special lists of colleges for women only, for both sexes, and for colored students; a list of institutions, extinct and existing, which are not recognized by the Illinois Board of Health, as not coming up to the requirements demanded; and other matters.

The reader will easily see that a work of this kind, authoritatively issued, cannot but have a widely beneficial influence.

Illustrations of the Influence of the Mind upon the Body in Health and Disease. By Daniel Hack Tuke, M. D., LL. D., etc. Second American Edition. Philadelphia: H. C. Lea's Son & Co. 1 vol. 8vo., pp. 482.

The growing intelligent interest in the study of psychical phenomena from the point of view of the physiologist, will insure for this revised edition of Dr. Tuke's excellent volume a great many readers. While he does not expressly deny that there are many phenomena which may call for other explanations, he justly claims that whatever can be explained by physiology, should not be placed in any other category.

With regard to this second edition, we do not find much in it not in the first. There are some diagrams added, and moderate notice is taken of several recent publications, but not so much as we had hoped. Those, however, who are not familiar with Dr. Tuke's entertaining pages, will do well

to possess themselves of a copy, and they will find it a real treat.

Eczema and its Management. By L. Duncan Bulkley, A. M., M. D. Second edition. 8vo., pp. 334. G. P. Putnam's Sons. Price, $3.00.

The reception given to the first edition of this monograph was gratifying to the author, and in the preparation of this second issue he has closely revised his text, and aimed to render it constantly more serviceable to the general practitioner. The frequency of eczema, and its usual ready response to appropriate medication, are reasons which may be offered for the prompt sale of a monograph upon it. The author himself speaks from a study of three thousand cases of it, and of course his experience cannot but be improving to read.

We do not advocate the omission of references to other workers in the same field, all of whom are substantially ignored by Dr. Bulkley. His defense of this omission, as given in the preface, is unsatisfactory; and the result to the reader is disappointing, or else deceptive. "Personal experience," on which he harps, is very good; but, as Bacon says, no sound surgeon is made by it alone; and an author is not justified in ignoring the sources of his learning, and in omitting to credit that which he borrows from antecedent workers.

History of the Discovery of the Circulation of the Blood. By Henry C. Chapman, M. D., etc. Philadelphia: P. Blakiston, Son & Co. 8vo., pp. 56. Price, $1.00.

This is a lecture, somewhat enlarged, and to be a chapter in a general work by the author. He reviews the subject carefully, and reaches the following chronological arrangement of the epochs of the discovery of the circulation:

1. Discovery of the structure and functions of the valves of the heart. Erasistratus, B. C., 304.

2. The arteries carry blood during life, not air. Galen, A. D., 165.

3. The Pulmonary Circulation. Servetus, 1553.

4. The Systemic Circulation. Cæsalpinus, 1593.

5. The Pulmonic and Systemic Circulation. Harvey, 1628.

6. The Capillaries. Malpighi, 1661.

To this division of the honors of this great discovery the careful historian will no doubt assent. As Dr. Chapman says, it was not the product of one man, but of the gradual progress of scientific observation.

Seventh Annual Report of the Board of Health of the State of New Jersey. 1883. 8vo., pp. 391.

Many interesting vital statistics and much general information are contained in this report. Of the topics discussed, we may mention: the prevention of smallpox, odor nuisances, diseases of operatives, healthy homes, modes of interment, health resorts, charitable and penal institutions, sewage of cities, school hygiene, local boards of health, adulterations of foods and drinks, milk inspection, climatology of the state, and the usual summaries of vital facts.

The Secretary of the Board is Dr. Ezra M. Hunt, of Trenton, N. J., who has done much to promote its efficiency, and who may be addressed for copies.

Transactions of the Medical Association of the State of Missouri for 1883. 8vo., pp. 262.

A well-made volume this, with a goodly array of original articles. Most of the subjects have a living interest, and are well handled. Of these we may mention a study by Dr. P. V. Schenck, of St. Louis, on the comparative mortality, insurability, and proclivity to disease in the two sexes. He gathers together a great many facts indicating the superior viability of the female, and suggests the explanation of this. Dr. J. M. Allen takes considerable pains with his essay, "Alcohol, its Effects upon the Human System:" but shall we never find a writer who can present fairly all sides of this question? Of the undoubted benefits of the substance in its sanitary and hygienic aspects, he says never a word; and if it promotes crime so much, why is there more crime in total abstinent nations than in those that drink? Some striking cases of vaginismus are recorded by Dr. Willis P. King. Dr. J. W. Traver, of Sedalia, advocates the elastic ligature in fistula, and claims good results from it. Dr. W. A. Hardaway reports the results of ten years' observation of electricity in skin diseases. He thinks electrolysis the best cauterant for the skin.

The Diseases of Children. A Hand-book for Practitioners and Students. By Armand Semple, B. A., M. B., 8vo., pp. 352. G. P. Putnam's Sons, N. Y. Price $1.75.

The author here presents to us a compact and well-prepared manual on this branch of medicine, one which is so important to the general practitioner. He begins with a series of general considerations on the general appearance of infants, their temperament, development, dentition, and on the methods of their clinical examination. From this he proceeds to a discussion of the various diseases to which they are liable, observing necessarily a great deal of brevity, but condensing judiciously. Scarcely any disease is omitted, reasonably full accounts being given of hereditary syphilis, skin diseases, tumors, and scrofulosis. For the purpose intended, the volume is a satisfactory one.

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D. G. BRINTON, M. D.,
115 South Seventh Street,
PHILADELPHIA, PA.

LOBELIA AND ITS DOSAGE.

Those of our readers whose medical memory can carry them back a quarter of a century or more, will easily recall the popularity in some sections of the "Thompsonian" medicines, especially "Number Nine" and "Number Two." Except in remote country localities, that "school" has passed away, and its professors have yielded to some other species of charlatans.

Their doctrines were of the simplest. All diseases came either from "heat" or from "cold," these words having some mysterious etiological significance never fully cleared up. The remedy for "cold" was red pepper, for "heat," lobelia inflata, and the amount of these substances poured into the patients was something wonderful.

Though, as we say, the race of Thompsonians seems about extinct in the United States, a number still exist in Great Britain. Our foreign journals contain a notice of a recent trial in London, where a herbalist was charged with manslaughter on the coroner's inquisition, the testimony showing that the patient had died half an hour after taking a tablespoonful of an acetic solution of lobelia prescribed by the defendant.

The defense was that lobelia is not poisonous, and such conflicting evidence from medical men and medical writers was offered that a verdict of "Not Guilty" was rendered. The jury could not do otherwise in the face of such a deposition as the following from a reputable physician of thirty years' standing:

During the whole of that time he had been in the daily habit of using and prescribing lobelia inflata. He had taken it himself in drachm doses. Emphatically it was not a poison. It was an invaluable medicine; there was nothing like it in the whole of the materia medica. To a very delicate child, and in a dangerous condition, he would give a teaspoonful of it in the syrup every three hours. Lobelia was a tonic, an expectorant, a sudorific, and a most valuable emetic. When the Poisons Bill was before the House of Commons, guinea-pigs were obtained from Covent Garden Market, and experiments were made with this so-called poison; but the guinea-pigs would not die from it—they grew fat instead. If lobelia did not act as an emetic, it would be perfectly harmless; it would pass through the body as a gentle aper-

ient; it would not have a depressant effect on the heart. However large the dose, lobelia could not be deleterious.

It is strange that a plant so familiar as this should have its properties so little ascertained. But so it is. Even Ringer, in his work on Therapeutics, attributes its neglect by the profession to the fact that they administer it in too small doses. He would give it much more freely.

Its only danger would seem to be its depressing effects on an abnormally weak heart. The nausea it causes is intense in certain persons, but not of danger or of long duration.

No doubt some of our readers have watched its effects on an extensive scale, and in full doses, and we should be glad to give publicity to their observations.

THE VIVISECTION LAW.

In reference to the facts in this case, referred to in our editorial, cur. vol., p. 375, two letters have been sent us, from which we make the following extracts:

From Dr. S. WEIR MITCHELL:

"We, Dr. H. C. Wood and myself, met Mr. Jones, then a State Senator, at his office. He was inclined to favor their bill. We pointed out its absurdities, and said we were willing to accept a bill to restrict, such as was about to be considered by the English Commons, but that it must end all further efforts to abolish vivisection. Mr. J. did not think our proposition would be accepted, or any one which did not mean a step towards total abolition. Next day he told us that the ladies would not entertain our offer. Mr. Jones does not to-day recall what passed."

From the second letter, written by Dr. H. C. WOOD, we take the following:

"We [Dr. Mitchell and myself] offered to agree upon a rational bill, similar to that then before the British House of Commons. Mr. Jones, after consultation with the women representing the society, refused to accept any bill not prohibitive in scope, or any modification of the bill then before the Legislature.

"We then, of necessity, used our influence to defeat said bill."

As the source of our information as given in the editorial was directly from the ladies themselves, it is quite clear that their representative, Senator Jones, did not apprehend their intentions and wishes correctly, and unwittingly placed them in a position which they did not desire to occupy.

THE SALUBRITY OF WASHINGTON CITY.

Consumption in the Eastern States is like fever and ague out West; every locality acknowledges some cases, but claims that it is much worse in some neighboring district.

The last city which has felt it incumbent upon itself to clear its sanitary reputation is Washington. Our capital, in fact, has always been an apt disciple in that process known in political circles as "whitewashing." A few years ago it was accused of being malarious. Its health officers immediately rushed to the rescue, and demonstrated that all this talk about malaria is nonsense. Then somebody wickedly said that Washington is a hot place in summer. At once, a list of thermometrical readings were published to prove that it is quite a cool spot at that season—favorable, indeed, as a pleasant place of refuge in the dog-days.

Now, some other unbeliever has accused it of showing a very high mortality for phthisis. So far as the bare assertion goes, it is hard to get around it. Here are the official figures, on the authority of Surgeon-General Hamilton:

DEATHS FROM CONSUMPTION IN SEVERAL CITIES.

	Census 1880. Popul'n	Deaths.	Year.	Average.
District and Washington	177,624	804	1882	1 death in 221
Baltimore	332,313	1,272	"	1 " " 261
Boston	362,839	1,564	"	1 " " 232
Cincinnati	255,780	698	1881	1 " " 366
Philadelphia	847,170	2,692	1880	1 " " 314
New Orleans	216,000	900	1881	1 " " 240
Richmond	63,600	247	1882	1 " " 257
San Francisco	233,959	690	1881	1 " " 339

This would seem conclusive. Not at all. The physicians and health officers of Washington are fully acquainted with the celebrated saying of an English economist, "Nothing is so deceptive as figures, unless it be facts!"

They have been making great efforts to show that these numerous deaths are in truth attributable to Washington's famously salubrious climate

—that its reputation as a health resort attracts the consumptives from other localities, and (this is, to be sure, a little awkward) they come and die there!

Another physician puts the mortality on the black race. The white folks, according to an "old and experienced" doctor, have an extraordinary exemption from lung diseases in Washington, where the colored population suffer from it in an equally extraordinary degree.

One of the "oldest" practitioners asserts that the climate there is so healthy that no disease prevails, and as to consumption, if it is common in either race, he has yet to learn it.

It would be rather amusing to read such defences, were it not at the same time a little sad to see how professional men let their opinions be influenced by their prejudices.

Notes and Comments.

Sequelæ of Diphtheria.

The sequelæ of diphtheria, as we know, are oftentimes more serious than the disease itself, and Dr. Alfred Carpenter endeavors to explain their occurrence (*Brit. Med. Jour.*, March 1, 1884,) by the following ingenious theory:

"But how will this explain the sequelæ which frequently follow upon diphtheritic mischief? I mentioned the fact that potato-rot is known to be propagated by the agency of resting spores. These are spores or germs which are shut up in a very resistant envelope, which enables them to retain their vitality in adverse circumstances; so that heat, if it be not much above 212°, and the cold even of zero, will fail to destroy it. These spores may, by analogy, be fairly assumed to exist. The ordinary spores are evacuated from the system as the patient recovers; but the resting spores remain in contact with the lining membrane of the blood-vessels, or are carried by the blood-current into some of those parts of the body which usually act as filters, and retain matters which are foreign to the blood-current. Perhaps they attach themselves to lining membranes, such as the valves of the heart. They may there, as they develop, set up ulcerative endocarditis; and being detached from the valves as they increase in size, they irritate the membrane; and, being carried on by the blood-current, they produce emboli at the spot to which they are carried. There they multiply, sooner or later, and the sequences of the disease appear as if they were separate and independent diseases, and as such are often registered among the causes of death as totally independent of the preceding diphtheritic condition."

Of treatment, he says:

"That treatment has been the use of ammonia as the proper stimulant, so as to reduce the acidity of the blood; for I have generally found these cases in constitutions which are either rheumatic with the lactic acid diathesis, or gouty from the excess of lithic acid in the constitution. I have generally given alkalies, as lithia, or potass. in combination with it; and when there has been an elevated temperature, which has indicated excessive chemical action in the invaded part, I have given the sulpho-carbolate of soda, with the greatest possible benefit. This salt reduces temperature, most likely by its antiparasitic power; for, as soon as a few doses have been given, the fever subsides, and the patient is much relieved; but, if the medicine be left off too soon, there is certain to be a relapse. This is very disappointing, and, if the practitioner be disheartened, and try another remedy, his patient will probably die. But if he return to his sulpho-carbolate, he will ultimately destroy all the developing resting spores in the tissues of his patient, and lead him on to a perfect recovery. It is curious how, in these cases, organ after organ becomes involved in the disease; it is also curious, but highly satisfactory, that the congestions or embolisms follow one another in point of time, otherwise there would be very little chance for the patient to recover. I would urge the practitioner to continue the sulpho-carbolate, in small doses, first with the ammonia, and, after a time, with quinine, avoiding altogether the mineral acids, as such appear to allow a more rapid development of the resting spores and a further relapse.

"As regards the local treatment of diphtheria, I have been accustomed to treat it on scientific principles, and attack the disease just as my gardener attacks the oïdium upon grapes, and other parasitic disease upon vegetables generally. I apply the powder of washed sulphur to the throat very frequently, blowing it into the fauces, and applying it by means of a brush with a little glycerine or honey, alternating the application with a little sulphurous acid in solution. It is not a painful application; it destroys the mycelium and the ordinary spores which produce the disease. If this be done quickly, so that the growths do not penetrate to the deeper tissues, no

resting spores will find admission to the body, and there will be no following sequelæ. I have also been accustomed to advise that creasote be kept in the room, so that the air may be placed in that condition which diminishes, if it do not destroy, the growth and development of hyphomycetous fungi."

The Antipyretic Treatment of Typhoid Fever.

There are very few instances in medicine where, with quite a satisfactory knowledge concerning the diseased processes in question, our therapeutics are so varied as in the case of typhoid fever. Dr. William Cayley publishes a paper in advocacy of the antipyretic treatment in the *Brit. Med. Jour.*, March 1, 1884:

"Dr. C. stated the principal conclusions which the advocates of the antipyretic treatment of typhoid fever believed to be established on sufficient evidence. First, they maintained that this mode of treatment fulfilled the physiological indications; that, by keeping down the temperature, the febrile metabolism of the tissues, and the accumulation in the blood of the products of this metabolism—and to this Dr. Murchison attributed most of the symptoms of the typhoid state—were much diminished. The granular infiltration and softening of the central nervous system, of the heart, of the liver, of the kidneys, of the voluntary muscles, was to a great extent prevented; and, by the stimulating effect of the treatment on the vaso-motor system, that want of tone and general relaxation of the arteries which was so marked a feature of the disease was counteracted. Many of the opponents of the treatment admitted these conclusions, though, by so doing, they gave up more than half the field of battle. It was not, of course, necessary to assume that the high temperature was the only or even the chief injurious agent in typhoid fever. It was enough to say that it was an important factor, which could not be denied; and it was one which it lay in our power to counteract.

"Secondly. They maintained that, where the treatment was efficiently applied, it produced a marked alleviation of the symptoms. And this, too, was acknowledged by many of the opponents, though by so doing they gave up the greater part of the remainder of the ground. Where the temperature was kept steadily down, the so-called typhoid symptoms were seldom seen. The persistent headache, the febrile oppressions, the sleeplessness, the muttering delirium, the stupor, the dry, glazed tongue, the muscular twitchings, the bed-sores, were either prevented or alleviated; and, to quote the words of Dr. Austin Flint, who was here endorsing a statement of Liebermeister, the old picture of the typhoid case was no longer to be seen, and the disease had lost half its terrors. Dr. Austin Flint, it was hardly necessary to say, was no enthusiast blinded by his eagerness for this method.

"Thirdly. It was maintained that, by this method of treatment, the complications of typhoid fever were neither rendered more frequent nor more severe. With regard to the pulmonary complications, the hypostatic congestion and pneumonia, there could not be a doubt but that they were rendered much less frequent. With regard to the intestinal complications, hemorrhage and perforation, Dr. Brandt asserted that, when the treatment was applied from the very first, they, too, were much diminished, and it was only reasonable to suppose that, as the tissues were less degenerated and softened, they would be more capable of resisting the sloughing and ulcerating processes. But, when the treatment was deferred till after the lapse of the first few days, it did not appear to exercise much influence, but there was no evidence that these complications were rendered more frequent.

"Lastly. It was maintained, and on evidence that could not, he thought, be overthrown, that by this method the rate of mortality was greatly diminished; so that, when arguments were brought against it, on theoretical grounds, by those who had never tried it, or on practical grounds by those who had only given it an imperfect trial, we might simply reply, with Professor Jaccoud, 'Nevertheless, while the rate of mortality in typhoid fever under the old method of treatment is about 19 per cent., under the antipyretic mode it is under 11 per cent.'"

The Therapeutics of the Lochia in Puerperal Affections.

Writing on this subject in the *Jour. des Sci. Med. de Lille*, Dr. Eustache says that these procedures consist of:

1. Avoiding the retention and stoppage of the flow in the uterus, or vagina, or at the vulva.

2. Modifying, by topical applications of liquids, the state of these surfaces, if they are injured.

3. Also modifying secondarily, by the same means, the offensive qualities of the discharge.

From this it is evident that these means should be employed whenever there is any lesion of the genital passages, especially in metritis; and they should be employed as often as possible before the morbid process has invaded the deeper parts, the

tubes, ovaries, and peritoneum. To fulfill these indications, the means are:

1. *Ergot*, which, given in small doses, two or three times a day, prevents the retention of the lochia.

2. *Intra-vaginal injections*, for which he preferably uses a solution of carbolic acid (1 to 100). The irrigations are made morning and evening, one or two being used until the liquid returns clear.

3. *Intra-uterine injections*, which should only be used when there are symptoms of metritis. For these Dr. Eustache uses the carbolic solution (1 to 100), at 86° to 89° Fah., and an irrigator holding a quart, to the tube of which he fastens a rubber tube, or an ordinary double-current tube. The tube is carried into the uterus to the depth of two or three inches. The irrigation should occupy from five to ten minutes.

Kreochyle.

Kreochyle is a new preparation of meat, made at the suggestion of Prof. Barff, and intended as a dietetic remedy in cases of acute disease, vomiting of pregnancy, aggravated dyspepsia, infantile diarrhœa, and similar conditions. The following analysis has been made by Dr. North, lecturer on physiology at the Westminster Hospital:

	Grammes per litre.
Soluble albumen,	35.125
Potash,	14.19
Phosphoric acid,	2.016
Nitrogen, in the form of kreatin, kreatinin, etc.,	2.4998
Chlorides,	6.186

The residue of meat, after having been used for the preparation of kreochyle, consists of

	Per cent.
Soluble albumen,	nil.
Phosphoric acid,	.704
Potash,	.181

Together with all the fat, fibrin and gelatin.

The *Birmingham Medical Review* concludes that kreochyle, therefore, is superior to beef tea, as it contains not only the extracts but a large amount of albumen. It is pleasant to the taste, and has proved valuable in the hands of many practitioners.

Acetonæmia and Diabetic Coma.

In the *Progrès Médical* (Nos. 50–51, 1883), MM. Cornillon and Mallat argue on the strength of one closely observed case against the theory that the comatose state in diabetes is due to the presence of acetone in the blood. Commenting on this statement, the *London Med. Times*, January 19, 1884, says:

With their opening assertion, that coma is a rare termination of diabetes, we fancy that physicians in this country will not be disposed to agree, for it is generally regarded as the most common termination of diabetes in young subjects. Less objection certainly can be taken to their conclusion, that acetonæmia cannot be considered as the direct and absolute cause of diabetic coma; this accords well with the opinions expressed when the subject was under discussion at the Pathological Society not long since. The authors further conclude, also, that the reddish-brown tint imparted to the urine by the perchloride of iron, and the rose tint by sulphuric acid, may be obtained in cases of long standing diabetes quite apart from any coma. These reactions bear no direct ratio to the amount of sugar present in the urine, and they are not usually found in fat diabetic patients; distillation or an intense and prolonged exposure to heat prevent these reactions; cold has not the same effect. In healthy persons, as well as the subjects of diabetes, perchloride of iron produces in contact with the saliva a reddish-brown color.

Post-Epileptic Automatism.

The phenomena oftentimes observed in connection with the epileptic state are most remarkable, and to a considerable degree is the following case, reported by Dr. T. Clifford Allbutt, in the *Brit. Med. Jour.*:

"A young gentleman who is now under my care for epilepsy of the ordinary type, went with two ladies the other day to make an afternoon call. After sitting awhile, he rose from his chair, and one of his friends said to the other, *sotto voce*, 'Oh, —— is in a fit.' This she knew by his face. To her surprise, he went to the tea-table, helped himself to tea, and then walked—full cup in hand—to a chair in another part of the room. When seated again, he recovered consciousness. My patient assures me he was utterly unaware of his act or acts, and was very much startled to find himself transferred in no time, as it were, from one seat to another distant one. It was rather by chance the matter was named to me, and the circumstances were too trivial to encourage exaggeration. The story is, doubtless, quite true, and proves once more the possibility of a series of purposive acts in epileptic states."

Complicated Pregnancy.

In view of the fact that such cases are liable to occur to any one at any time, the following, which

Dr. W. F. O'Grady reports in the *Brit. Med. Jour.* for February 23, 1884, possesses interest:

A woman was admitted, about six years ago, into the Manchester Workhouse Hospital, New Bridge street, who stated that about three weeks before, being at the time three months pregnant, she fell downstairs, and soon afterwards noticed that her belly grew very full. She grew larger daily, and made a fair amount of water; but, when doing so, had to push the enlargement to one side. On examination, there was a pear-shaped tumor reaching to the umbilicus, tense, fluctuant, and dull on percussion. On passing a catheter, 100 ounces of water were drawn off. The gravid uterus was found to be retroverted; this was reduced, and the woman kept prone for a week. I delivered her of a fully-developed healthy child some months afterwards. The medical man under whose care she had been for a fortnight, sent her in as a case of tumor of womb or ovaries, requiring tapping.

Poisoning by Red Precipitate.

Dr. E. Kennedy thus writes to the *Brit. Med. Jour.*, January 12, 1884:

In the text-books accessible to me, there are but two instances cited of poisoning by red precipitate, and scarcely anything stated as to treatment. It would appear, then, that this agent is rarely chosen by the suicide or homicide; hence, it may be worth while to place on record a case recently occurring in my practice. A woman of middle age swallowed twopennyworth (about two drachms) of red precipitate. On my arrival she was vomiting, salt and water having been administered by her husband. I administered an emetic of sulphate of zinc; afterwards raw eggs, magnesia in milk; the diet to consist of egg in milk, bread and milk, etc. The symptoms complained of were, epigastric pain of a burning character, and an indefinite feeling of pain diffused over the abdomen. The next day there was hæmatemesis, and passage of florid blood *per anum*. After this the discomfort gradually subsided, and in five days the patient was convalescent.

Lead Poisoning.

One would hardly expect to find the origin of lead poisoning inside of the kitchen boiler, but so it was in a case that is reported in one of our foreign exchanges. Repeated and careful examinations failed to reveal any cause for the evident symptoms of lead poisoning from which the family were suffering. Finally, upon examining the kitchen boiler, a quantity of red lead was found therein. A new tap had some few months before been put in the boiler, and one of the workmen had carelessly thrown in a large lump of red lead, which was left over when they had finished the job, in order to get rid of it. Here, then, was the source of the trouble; and since it has been removed the family have recovered their usual health. The boiler had not been used for some time after the tap was put in, and when it was, the servant was warned not to use the water from it for cooking purposes. This order she appears to have obeyed only so far as her own food was concerned, hence her immunity from sickness.

Rupture of Aorta During Labor.

This case, which Heinricius reports in the *Archives de Tocologie*, January, 1884, is supposed to be without a parallel in medical literature. A woman aged 38, for the third time pregnant, and in whom the uterine contractions were energetic, was suddenly seized with a convulsion, became comatose, and died. The forceps were applied, and the child delivered. The autopsy showed that the pericardium was distended with a large quantity of blood. The heart was fatty, and strongly contracted. A little above the sigmoid valves was found a rupture of the aorta, involving the internal and middle coats. The aortic coat was very thin at the seat of rupture, and there was a small spot of atheroma on the ascending portion of the vessel. Heinricius thinks that the rupture was due to the increased blood-pressure caused by the energetic contractions of the uterus and the abdominal walls.

Another Argument for Vaccination.

Dr. Walter Buchanan thus writes to one of our English exchanges:

If nothing else could convince us as to the value of vaccination, I think the following facts would be sufficient:

In July last, I was called to see Mrs. B., who was suffering from small-pox. Her husband and three children were unvaccinated; the father and two eldest were vaccinated by me when the eruption on the mother was in the papular stage: the youngest being very delicate, and the parents being opposed to vaccination, I deemed it advisable not to operate on the child. The results were as follows:

1. The mother made a good recovery.
2. The unvaccinated child died from small-pox on the fourth day of the eruption.
3. Those who were vaccinated escaped from infection entirely.

Chestnut Leaves in Whooping-cough.

Dr. J. Coopreider, of Taylorsville, Ind., writes to the *Canada Med. Record* that he has used the *fluid extract of chestnut leaves* for whooping-cough, with great success. He says:

The dose employed is from fifteen to sixty drops, according to age. If the child is large enough, I give it in hot water as an infusion, sweetened; to a small child, in simple syrup or elixir.

It not only relieves or lightens the paroxysms, but will actually cure in from four to five days.

I give four to six doses per day, according to the severity of the case.

If good fresh leaves can be procured, I make the infusion as a tea, say two drachms of the leaves to half a pint of boiling water, and give two ounces at a dose, sweetened with white sugar.

Jaborandi in Bright's Disease.

Both reason and experience do most clearly indicate the beneficial influence of jaborandi in Bright's disease. We are, therefore, pleased to note in the *Med. Record*, March 22, 1884, a communication from Dr. F. A. O'Brien, of Atlanta, Ga., in which he calls attention to the beneficial action of jaborandi, given in small or moderate doses, for a long time, in the various forms of albuminuria classed under the head of Bright's disease. He has found that the drug is better borne when combined with nux vomica than if exhibited alone. In his opinion the action of jaborandi is not to be explained solely from its sialogogue and diaphoretic effects. He believes that it has a specific influence on the kidneys, permitting the tubules to relieve themselves of the inflammatory products that block up their lumina.

An Insecticide for Fruit Trees.

From the *Chemist and Druggist* we learn that Mr. R. McClachlan, F. R. S., reporting on an insect attacking the orange-trees in British Guiana, says:

"The most effective of all insecticides is termed 'kerosene emulsion,' the formula for the preparation of which is here given:

Pure kerosene,	1 gallon.
Condensed milk,	1½ pints.
Water,	3 pints.

Mix the milk and the water before adding the oil, and churn until the whole solidifies and forms a 'butter.' In applying this preparation, the kerosene 'butter' should be diluted with from twelve to sixteen times its quantity of water, and then be applied immediately; for if it is allowed to stand, the 'butter' rises to the surface, and the solution is imperfect. The insects can be more readily combated by insecticides during the very short period in which they are active, just after emergence from the egg."

Kerosene Poisoning.

In the *Druggist's Circular and Chem. Gaz.*, February, 1884, Dr. C. S. Wheeler, of Williamsburg, Mass., reports the history of a case of kerosene poisoning, which is instructive, as these accidents are rare. He says: "I was called October 29th to see a child, eighteen months old, who had swallowed an unknown quantity of kerosene, though the amount did not probably exceed two ounces. The little patient, seen one hour subsequently to the swallowing, was vomiting, purging, cyanotic; a tendency to coma existed, the pulse was 130, weak, and somewhat irregular; respiration was also irregular. Treatment: ordinary emetics were given before my arrival, hence only stimulants and alkalies were ordered. After a few days of gastro-enteric febrile movement, the child recovered. I have heard of several ounces of kerosene having been taken by adults without perceptible results, but the above case compels me to doubt the statement."

Congenital Femoral Hernia.

Dr. Sabourin has recorded, in the *Progrès Médical* (January 26), the case of a female child, born at seven months, and small but well developed, in whom the mother, a few days after birth, noticed a swelling in the right inguinal region. Six weeks later, when Dr. Sabourin was called in, the tumor had attained the size of a filbert; it was situated in the upper part of the right thigh, below Poupart's ligament, and on the inner side of the femoral artery. It disappeared on pressure with a distinct gurgling sensation, and reappeared when the child cried. After reduction, the borders of an opening in the fascia could be felt. The hernia was cured in less than three months by the pressure of a small pad.

Liebig's Infants' Soup.

According to Mefidorsky (*Pharm. Zeitsch. f. Russ.*), quoted in the *Rundschau*, this food can be thus prepared: Take 480 parts of freshly-ground wheat flour, not the finest; 480 parts of ground malt; 15 parts of bicarbonate soda; mix with 960 parts of water, and 4,800 of milk. Stir well

over a gentle fire till the mixture begins to thicken. Then remove the mixture and stir well for five minutes. Heat again, and when it next begins to thicken, raise the heat till the mixture just begins to boil. Then pass through a fine strainer, so that the husks may be removed. The food is sweet enough without additional sugar. It will keep for 24 hours.

Tincture of Cantharides for Suppression of Urine.

This drug is not usually recommended in such cases, but in the *Boston Med. and Surg. Jour.*, March 22, 1884, Dr. W. C. B. Fifield reports a case, which he had seen in consultation with Dr. Rogers, of Dorchester. The patient was a hard drinker, whose symptoms were at first obscure, but who had later had albuminuria with casts. Complete suppression had lasted some days. Active treatment had been of no avail, and the patient was comatose and failing. Tincture of cantharides was then given hourly in drop doses, and after some hours the secretion was reëstablished, and the patient recovered so far as to be out.

Artificial Coumarin.

From the *Pharmaceutical Journal* we learn that coumarin is the odoriferous principle of the tonka bean, woodruff, sweet-smelling grass, and other plants, which owe their aroma and value exclusively to the coumarin they contain, the other principles being not only valueless, but disadvantageous. Coumarin has now been made artificially: one method of preparation is by warming sodium salicylaldehyde ($NaC_7H_5O_2$) with an anhydrous acid, or by boiling salicylaldehyde with sodium acetate and anhydrous acid. Recent improvements in the process have greatly shortened the time and expense.

Dislocation Forwards of the Four Inner Metacarpal Bones.

As a valuable contribution to surgery, it is of interest to note that this rare accident is described by Habillon, of Nancy, in his graduation thesis. He has collected thirteen cases, all men, and resulting either from direct violence or from extreme flexion or extension of the wrist. In his own case, the dislocation was caused by the passing of a wheel over the hand, and there was a wound on the dorsal aspect of the wrist. The reduction is easy, but difficult to maintain, and a certain degree of subluxation and stiffness is generally left.

CORRESPONDENCE.

A Plea for Venesection.

EDS. MED. AND SURG. REPORTER :—

Apropos to the remarks on the subject of bloodletting by Dr. Hiram Corson, I send you the following report of a case which, to me, seemed to present some interesting features:

About 3 p. m. on November 26, 1883, I was summoned hastily to see Mr. T. M., aged about sixty-five, whom I found presenting the following symptoms: Clonic convulsions, very severe, and occurring on an average about one per minute. Face very much flushed—nearly livid. There were some spasmodic efforts to reject the contents of the stomach. Breathing stertorous. The family informed me that about half an hour before, he had been sitting in a chair, and suddenly commenced to jerk his head backwards and over one shoulder, and in a moment or two fell to the floor in convulsions. I observed that the left arm and leg did not participate in the convulsive movements. I immediately diagnosed "apoplexy," and with difficulty, on account of the violent nature of the convulsions, got his coat off and his sleeve up, with a view to blood-letting. The blood did not start readily—a few drops only at first; after a little it came more freely, and I finally, by tapping a vein in each arm, succeeded in getting about a *quart*. There was no marked change in his condition, unless, perchance, the lividity of the face might have been slightly lessened.

At this point, my friend Dr. Hurlbut arrived. We consulted hastily as to the best means of averting death, which seemed imminent. The pulse, which was strong and full at the first and about 110 per minute, seemed possibly a trifle softer. We resolved to bleed until there was some marked impression made upon the convulsions. Both arms were ligated and new veins opened. The blood ran very slowly, while we watched the symptoms. We let the blood run until two *pint tins* had been filled, making an aggregate of over *two quarts*. The convulsions had now nearly ceased, the face had become pale, and the breathing less stertorous. There were still some twitchings of the muscles of the face and some spasmodic actions, confined to the right arm and leg, the left side being as from the first apparently paralyzed. I went to my office, a few rods only, for a hypodermic syringe, intending to inject a small quantity of morphia to quiet this muscular twitching; but when I returned a few moments afterwards, the spasmodic action had entirely ceased, and the morphia was not used. About three hours later we saw our patient, and found that there were some signs of returning consciousness. At this point there was an interesting feature of the case which we are unable to account for, viz., the paralysis, which had been so well marked on the *left* side had been transferred to the *right* side, and the *left* side he now seemed to move with ease. The convulsions did not return. He passed a reasonably good night. In the morning consciousness had so nearly returned that he was able to answer questions put to him, though not always rationally. The paralysis had entirely

disappeared save as regards the tongue, which seemed a trifle thick. From this time on he made a good recovery, and has been apparently in better health than before the attack. The particularly marked feature about this case was the unusually large quantity of blood taken. In our opinion no less amount of blood taken, and no other kind of treatment, would have saved him. The measured quantity of blood was not the only amount of blood lost, for a considerable quantity was lost in our endeavors to hold the arms over the receptacles for the blood, the spasmodic actions greatly hindering our efforts. Now, the question arises, Is there any limit to the amount of blood which should be taken in such cases? Our patient was of plethoric habit, and could therefore endure a greater loss than some. We think the rule should be: Bleed until you get the desired effect. Query: Why did the paralysis alternate from one side to the other? and could the patient have been saved by any treatment less heroic?

WALTER H. PARCELS, M. D.

Lewistown, Pa.

Running for Trains.

EDS. MED. AND SURG. REPORTER:—

In your last issue was a short article as a caution against the very pernicious practice of running to catch trains. Had I read and heeded this advice, something over a year ago, I perhaps should not be so ready to see the importance of riveting this knowledge of caution on the minds of physicians, and through them to the public and business men of our country. But my personal experience on this subject leads me to see that no one subject demands more attention than this; and perhaps no advice a physician could give would be more kindly received, or be better heeded, than advice on the subject we are interested in, viz., running for trains. And if the advice of physicians be, lose a train, or a dozen of them, rather than put future health or present life in jeopardy, and if this advice be well heeded, it no doubt would save many a valuable life among our great ones. My own experience in running to catch trains is this: Something over one year ago I was called to see a patient several miles from home, and consequently took the train. Only having a short time to visit my patient in, and walk about eighty rods from the depot, I made as good time as possible to get where my patient was; but owing to circumstances connected with the patient, I could not get started for the depot until almost the time that the train was due at the depot. I had only just started from the house, when I saw the train coming. Had I used a little judgment I should not have made the attempt to get to the train. But I thought I might make it, so I started on a fast run, which I kept up to the depot, and just as I reached the depot the train departed, and I, being too much exhausted to make any extra effort to reach the train, was left behind to feel ashamed that I had shown so little judgment, and worse than all, to find that I could not breathe naturally for the rest of that day. I could with difficulty get sufficient air to keep up the demand to sustain life; following this was a constant pain near or in the region of the heart, with a remitting pulse. After three or four months the pulse regained its regular beat, but a feeble, weak pulse remains with me; also, a dull, heavy pain, which is made worse by anything which excites the circulation. Stimulants I do not use, so cannot say how they would affect me—not even tea or coffee.

I have consulted some good physicians; have tried blistering and tincture of iodine to surface over the heart, but all the effect I see from this was to excite a few small-sized carbuncles; so am now wearing a good, strong irritating plaster over the cardiac region, on the scapular side. This, apparently, is doing good, as it relieves the pain, and is, in my mind, indirectly giving strength to the feeble action of the heart. Nux vomica was recommended by one. This not only seemed to do no good, but I thought actually made the pulse more intermittent, and increased the pain; so I stopped its use and commenced taking small doses of quinine, iron, and strychnia. This appeared to regulate the pulse, after which I stopped its use. Have not taken anything now for eight or ten months; am doing well with my plaster, and all the rest I can get. J. D. APPLEY, M. D.

Blodgett Mills, N. Y., March 16, 1884.

Chronic Nasal Hemorrhage.

EDS. MED. AND SURG. REPORTER:

Please oblige the writer by requesting those of your readers whose experience may enable them to speak, through the department of "Queries and Replies," in the REPORTER, with regard to the best curative treatment for *chronic nasal hemorrhage*. We refer to the case of a boy (white), now about ten years of age, who, we learn from his mother, has been subject to frequent spells of bleeding from the nose, every few days since early infancy. Sometimes the bleeding is very profuse and exhausting; at other times it is slight, merely issuing drop by drop.

The patient has only been under our notice during the past year; and we have never seen him with a serious hemorrhage, and hence have never been compelled to resort to any active measures for his relief. Neither have we been able to make any thorough examination of the interior nares, because, at the time of our visits, the bleeding surface was covered with clotted blood, and the discharge almost arrested by the local use of such astringents as alum water, and more especially by a strong solution of ammonio-ferric alum—introduced by means of pledgets of cotton. The tincture of the chloride of iron has also been freely used, internally, as an astringent tonic. The attacks are not often so violent as to cause alarm, but the trouble is in a constant tendency to the return of the bleeding; and it reappears without any known exciting cause. It frequently occurs during sleep. Its return is often foreshadowed by *headache*. It is extremely rare for him to pass two weeks without some bleeding; and it sometimes continues slightly two or three days in succession. The boy always presents an *anæmic* appearance, but has a good appetite, and is otherwise healthy. He goes to school, but frequently has to go home during the day, on account of the bleeding. And he also joins in the amusements and plays of other children of his age.

The first question we ask is, "What means can be adopted to bring about a radical cure of this

hemorrhagic diathesis?" The second is, "Would not some evil results, in all probability, follow such a cure?" Finally, "What is the best course to be pursued in this case?"

We have never examined the condition of the nasal membrane, for want of an opportunity, as before stated. The boy has, habitually, a "nasal tone" in conversation, and the bleeding is invariably from the right nostril.

We would be pleased to have information from any who have had experience with a similar case.

W. S. F., of Md.

March 10, 1884.

Eczema Scrofulosa.

Eds. Med. and Surg. Reporter:—

J. H. A. K., æt. 50, came into the Pittsburgh Infirmary for treatment February 27, 1884, suffering with eczema scrofulosa. He had been a sufferer with this disease since the middle of September, 1883. The dermis on the front and internal surface of the right thigh was quite denuded of its epidermis, red, and unbearably itchy; on the the left thigh there were vesicles, and the parts very red and itchy. The disease affected the genital organs and anus, and in fact extended all over the body. The patient's father died of cancer at the age of 53 years. Paternal and maternal grandparents lived till between the ages of 60 and 70 years. There was no history of disease in them of a specific character. The subject of this paper suffered with periostitis and ostitis when he was 14 years old, and lost the fibula and os calcis of the left leg and foot from these diseases. The left elbow-joint was also affected, and now there is anchylosis of it. At the present time there is a fistulous opening leading to the posterior part of the femur, just above the knee-joint, through which necrosed bone can be felt. The patient has been treated by several physicians since last September for eczema, without any relief. Drs. M. D. Jones and A. Lange saw the case with me when he first came into the hospital. At this date he is almost recovered from eczema.

Treatment, internally, 15 grains of iodide of potassium three times a day, after eating, generous diet, hot bran bath once a day, and unguent of the oxide of zinc smeared over the affected parts three or four times a day.

I believe, with a great majority of physicians of the present day, that scrofula, cancer, and in many cases phthisis pulmonalis, have their origin in syphilis, and require the same constitutional treatment, and that the subject of this paper is a victim to transmitted syphilis.

J. M. Batten, M. D.

Pittsburgh, March 15, 1884.

Heredity.

Eds. Med. and Surg. Reporter:—

In your remarks on Heredity, page 179, vol. L, No. 6, you "lean", to the proposition that all *diseases* resulting in change of form or function may be transmitted. If accidentally acquired change of form may not also be transmitted, how will you account for the following cases?

In 1857 Mrs. W. died of phthisis, leaving three daughters and one son. Her genital region was very badly scarred from a burn received before puberty, and she stated that after recovery she underwent an operation for occlusion of the vagina. The oldest daughter had but one child, a boy. The second daughter had but one child, a girl, which had congenital closure of the vagina. The third daughter has, so far, had but three children—the two boys being all right, but the girl required an operation for congenital occlusion of the vagina. I have lost track of the boy, but hope soon to get on his trail, and keep it till he also raises a family.

F. R. Millard, M. D.

San Diego, Cal.

News and Miscellany.

Correction.

In No. 9, p. 263, cur. vol., a rather ridiculous error occurred by the accidental omission of the word "apparently" before "still-born child." One or two friends have called attention to it, so we make this note.

Jefferson Medical College.

The fifty-ninth annual commencement of the Jefferson Medical College was held in the Academy of Music on Saturday, March 29, 1884. The degree of M. D. was conferred upon two hundred and fifteen students, and the following prizes were awarded:

1. $100, by Henry C. Lea's Son & Co., for the best thesis, to John A Buffington, of Maryland; with honorable mention of the theses of W. H. Vallette, of Ohio, and S. B. Horning, of Pennsylvania.

2. Gold medal, by R. J. Levis, M. D., for the best report of his surgical clinics at the Pennsylvania Hospital, to Thomas C. Hood, of Indiana.

3. Gold medal, by Thomas G. Morton, M. D., for the best report of his surgical clinics at the Pennsylvania Hospital, to Frederick Hertel, of Delaware; with honorable mention of the reports of Andrew B. Kirkpatrick, of Philadelphia, and Thomas Roby, of Missouri.

4. Gold medal, for the best essay on the subject pertaining to the practice of medicine, to James H. Bell, of Texas; with honorable mention of the thesis of B. W. MacNichol, of New York.

5. Gold medal, for the best original research in the chemical laboratory, to Sidney A. Stokes, of Pennsylvania; with honorable mention of the essay of Irving R. Schoonmaker, of Pennsylvania.

6. Case of instruments, for the best original research in the materia medica laboratory, to J. Edwin Sprenkle, of Philadelphia.

7. Case of instruments, for the best essay on a subject pertaining to physiology, to David A. Kappes, of Ohio; with honorable mention of the essay of William F. Kuhn, of Ohio.

8. Case of instruments for the best essay on a subject pertaining to surgery, to William A. Vaughan, of Virginia; with honorable mention of the thesis of A. J. Comstock, Jr., of California.

9. Gold medal for an essay on a subject pertaining to obstetrics, to Levi Huber, of Pennsyl-

vania, and another of equal value to L. M. Nason, of Maine; with honorable mention of the essays of John W. Felty, Justus Sinexson, and Evan O. Kane, of Pennsylvania.

10. Gold medal, for the best essay on a pathological subject, to William H. Fenner, of Pennsylvania; with honorable mention of the essays of Edward F. Wagner and John M. Fisher, of Pennsylvania.

The valedictory address was delivered by John H. Brinton, M. D., Professor of the Practice of Surgery and Clinical Surgery. In pointing out to the newly-made doctors the pathway to professional success, Dr. Brinton said that if they expected to become rich men, they would in all probability be disappointed. Few medical men, by the practice of their profession, ever amassed wealth; but they could always, by diligence and devotion to it, attain a decent competency. With this, and with the daily healthful exertion necessary to ensure it, came, he thought, as great a degree of happiness as any man can reasonably hope for. A successful physician must have a sound medical knowledge; but although nominally the graduates ceased to be students, in reality their student life had but begun. He advised them to keep note of their cases, so that in turn they could be able to contribute something to the general stock of medical learning. They should not, however, rush carelessly into print, but write because they have something to say, not because they wished to say something. They should always seek to preserve their individuality, and not be carried away by theory nor by plausible or fallacious reasoning. Dr. Brinton advised the graduates when they had gotten fairly to work, to join a good medical society, which would prevent them from becoming rusty; to keep up an interest in their calling, and take care of their business; to work steadily and work in a right manner and a proper spirit, and with honesty and a conscientious purpose. The physician should be a gentleman, not only in outward demeanor, but in very heart, and should most carefully refrain from impressions of ill-will towards his brethren, or adverse criticisms of their actions. Dr. Brinton impressed upon his hearers the great duty they owed the science of medicine in the solution of the problem of many diseases which still balk medical treatment, such as consumption, diphtheria, the wave of pestilence, wide-spreading cholera, and fevers, deadly as were the plagues of Egypt, and those poisons of the blood, cancer, scrofula, and all their kin. In concluding, Dr. Brinton said:

"The history of the past often points with prophetic finger, to the future. One man, great Jenner, barred the spreadof small-pox, and other maladies may yet be checked by men whose names will then be blessed not less than his. When the times are ripe these men are born. I need not wander far to find a scarce-closed grave of such a one; one of your predecessors, a child of our own Alma Mater, who by his life and teachings, and by the unspeakable benefits he has conferred upon suffering womankind, deserves unquestionably to be regarded as one of the great benefactors of his race. Well may the profession throughout this land join hands to raise a monumental tablet commemorative of the loveliness of the character, the goodness of the works, and the undying fame, of Marion Sims."

Pasteur's Laboratory.

M. Pasteur's son-in-law has written a work descriptive of the great man's scientific life, entitled "L' Histoire d' un Savant par un Ignorant," from which we quote the following:

"All the animals in the laboratory, from the little white mice hiding under a bundle of cotton wool to the dogs barking furiously from behind their iron-railed kennels, are doomed to death. These inhabitants of the laboratory, which are marched out day after day in order to be subjected to operations or other experiments, share the space with still more ghastly objects. From all parts of France hampers arrive containing fowls which have died of cholera or some other disease. Here is an enormous basket bound with straw; it contains the body of a pig which has died of fever. A fragment of lung, forwarded in a tin box, is from a cow dying of pneumonia. Other goods are still more precious. Since M. Pasteur, two years ago, went to Pauillac to await the arrival of a boat which brought yellow fever patients, he receives now and then from far-off countries a bottle of *vomito negro*. Tubes filled with blood are lying about, and small plates containing drops of blood may be seen everywhere on the work-tables. In special stores bottle-like bladders are ranged resembling small liquor bottles. The prick of a pin into one of these bladders would bring death to any man. Inclosed in glass prisons millions and millions of microbes live and multiply."

The Scavenging of Paris.

Hitherto the system of scavenging in Paris has been imperfectly carried out. The refuse matter of each house used to be deposited in the street after 10 o'clock at night, where it lay till the next morning, when it was carted off by scavengers. This was found to be a great nuisance; and a new order from the Prefecture of Police has just been published, altering this state of things. The refuse matter is to be deposited in receptacles for the purpose early in the morning only, and is to be immediately removed by the municipal scavengers. Any infringement of this regulation by the proprietors or porters of houses, who will be held reponsible, will be severely punished. But this new arrangement does not meet with the satisfaction of the "chiffonniers," who have petitioned the Prefect of Police to allow matters to remain as before, as the new regulations would be simply ruinous to them. The fact is, rag-gathering would appear to be not an altogether unprofitable calling, as cases are related where some of these people have actually died in comparative wealth. Not long ago a "chiffonnier," at his death, was found to possess $20,000, and yet he lived in the most abject misery.

Jefferson Medical College Alumni.

The Alumni Association of Jefferson Medical College held their fourteenth annual meeting at the college, March 28, and elected the following officers:

President.—Professor S. D. Gross.

Vice Presidents.—Drs. A. Hewson, Ellwood Wilson, R. J. Levis, Roberts Bartholow.

Treasurer.—Dr. Nathan Hatfield.

Secretaries.—Drs. T. H. Andrews and R. J. Dunglison.

The deaths of Dr. J. Marion Sims, an alumnus of the college, and Dr. R. T. Coleman, an honorary Vice President of the Association, were appropriately referred to in the report of the Executive Committee, and a continuance of the social meetings of the graduates was recommended. Dr. Theophilus Parvin, the new Professor of Obstetrics in the College, was elected an honorary member of the Association; and Dr. J. W. Holland, of the University of Louisville, Ky., was chosen to give the address next year.

The Treatment of Syphilis.

Bichromate of potass as an antisyphilitic has for partisan in Saxony Dr. Güntz, and in France Prof. Vulpian. The former employs it in solution charged with carbonic gas, as follows:

℞.	Bichromate of potass,	$\frac{3}{5}$ gr.
	Nitrate of potass,	2 gr.
	Nitrate of soda,	2 gr.
	Chloride of sodium,	4 gr.
	Water charged with gas,	$\frac{3}{5}$ xx.

M. Vulpian also recommends it in dyspepsia depending on a catarrhal affection of the stomach simulating carcinoma of that organ. He prefers it in the form of pills:

℞.	Bichromate of potass,	1 gr.
	Extract of valerian,	10 gr.

Divide into 5 pills. One, two, or three in the day.

It will be remembered that it was Prof. Vulpian who attended the late Count de Chambord, and having recognized that disease as catarrh of the stomach, prescribed these pills, but, it must be added, with little result.

Legality of Cremation.

It has been decided by the English courts that cremation is a legal method of disposing of corpses. The Cremation Society, however, have prudently adopted the following rules:

1. An application in writing must be made by the friends or executors of the deceased—unless it has been made by the deceased person himself during life—stating that it was the wish of the deceased to be cremated after death.

2. A certificate must be sent in by one qualified medical man at least, who attended the deceased until the time of death, unhesitatingly stating that the cause of death was natural, and what that cause was.

3. If no medical man attended during the illness, an autopsy must be made by a medical officer appointed by the Society, or no cremation can take place.

Fascination.

From the *Brit. Med. Jour.*, we learn that M. Brémond has made, on sailors, soldiers, and officers, from fourteen to twenty-six years of age, a large number of experiments showing that lethargy, catalepsy, and somnambulism, can be produced in healthy non-hysterical people, and that these phenomena are preceded by a peculiar state of fascination. The period of fascination is characterized by a sudden increase in the frequency of the pulse. One-third of the young men experimented upon manifested one or more of the above-mentioned symptoms.

Delusions and Executive Ability.

The *Birmingham Medical Review* reports that one of the members of the Executive Council of the Bank of Brussels was many years ago attacked by the delusion that his legs were glass, and positively refused to move. A financial crisis came, involving the bank to some extent. Mr. B. got up and went to Brussels, where, by his energy and skill, he largely assisted in getting matters straight. At the end of the month he returned home, remarked how marvelous it was that he had not smashed even one of his legs, and, taking to bed, never again left it.

The Origin of the Hymen.

Dr. Pozzi, of Paris, in a recent paper defended the opinion that this membrane depends from the vulva and not the vagina, as was the opinion of Budin. Further, he considered that that portion of the genital organs commonly called the bulb of the vagina as the analogy of the urethral bulb in man, was nothing more than a rich plexus of vessels.

The Mortality Caused by One German Hog.

In a dispatch from Berlin, dated March 27, 1884, it is officially stated that last year at Ermsleben, a small town of Prussian-Saxony, 403 persons were seriously ill and 66 died from trichinosis. The disease was caused by eating raw pork, which all came from one and the same hog.

Items.

—It is stated that the foot-ball eleven of a prominent college started on its late contest with eight substitutes and a surgeon.

—The Indiana State medical Society meeting has been postponed until after the meeting of the American Medical Association.

—A bill has been introduced into the House of Commons providing for the restriction of the sale of patented medicines until they have been officially analyzed and pronounced not poisonous.

—The New York Assembly has passed a bill limiting the time of service of conductors and drivers on city railways to twelve hours a day. In Philadelphia these men work from sixteen to eighteen hours a day.

—The fifth International Congress of Hygiene will meet at the Hague, August 21 to 27, 1884. The papers to be read will consider individual and general hygiene, sanitary police, demiography, and medical statistics.

—The twenty-third annual commencement of Bellevue Medical College, New York, was held in Steinway Hall on Thursday evening, March 13. The degree of M. D. was conferred upon one hundred and forty-nine graduates.

—Another coroner's verdict. It was rendered at Pekin, Ill., on the body of a man found in the river, and declared "that the late deceased had come to his death by a blow on the head inflicted either before or after he was drowned."

—James Russell Lowell writes to a friend in Boston that he likes living in London "all but the living." He is becoming dyspeptic, and attributes it to his entire and enforced abstinence from fresh and salt cod, clams, buckwheat cakes, and baked beans, which are actual necessities almost wholly unknown in Great Britain.

—The new buildings of the Medical Department, University of Vermont, erected by John P. Howard, at a cost of $30,000, was dedicated March 6. The building was presented to the University in behalf of Mr. Howard by Henry Ballard, and was accepted in an address by President Buckham. The medical class numbers 200 students.

—The Maryland House Committee on Ways and Means has reported favorably Mr. Lane's High License bill, which has already passed the Senate. For selling liquor in quantities not less than a pint, the prices of license range from $50 on $1,000 worth of stock, to over $300 on $30,000 in stock; for selling quantities less than a pint, from $150 to $500, according to population.

—The question of the regeneration of divided nerves in man after suture has been the subject of fresh discussion at recent meetings of the Société de Chirurgie (*L'Union Médicale*, December 4). Mr. Pick has recorded a case of suture of the radial nerve six months after its complete division, with the result of functional restoration after a period of twelve months from the operation.

QUERIES AND REPLIES.

EDS. MED. AND SURG. REP.—

Please give me the result of your experience in the use of plaster of Paris dressing in the treatment of club-foot. If you have found it satisfactory, will you be kind enough to write me, giving minutely your method of application? That is to say, after the tendons have been divided, do you apply the plaster at once, as in the case of fracture; and, if so, how long would you allow it to remain before removing it? how frequently would it be necessary, say in an infant less than one year old, to change the dressing? and how long, generally, should the child wear the plaster dressing before it would be safe to dispense with it? Can the cure be brought about with the plaster dressing alone, or would it be better, after a time, to apply the ordinary club-foot apparatus? I am told that the practice of treatment by the use of plaster of Paris is becoming quite prevalent, and as I am so thoroughly "behind the light-house" on this subject, I ask for information. Any paper which you may have at hand, relating to the case in point, will be thankfully received.

Mansfield, O. W. H. R.

A Formula for Salicylic Acid.

EDS. MED. AND SURG. REP.—

Will you please give me, through your journal, a formula for the administration of *acid salicylic* which will effect a *thorough solution of the acid*, and at the same time in no sense detract from its medicinal qualities? Does the exhibition of alkalies used by druggists to effect this solution destroy the action of the salicylic as an acid, or injure its chemical or medicinal qualities in any sense? E. S. B.

D. M. P., of Pa.—Labarraque's solution is the *liquor sodæ chlorinatæ*.

Dr. B., of Pa.—We have been unable to learn of any observations connecting the presence or the absence of the uvula with fertility.

Dr. V. O., of Ky.—The statement that persons in the Arctic regions are little subject to lung disease is an error. Dr. H. Rink states that in Greenland thirty-five per cent. of the deaths are from pulmonary affections.

Dr. A. K., of Md.—The mineral waters of the United States have never been thoroughly examined. We believe that there are many springs here equal to the best in Europe.

MARRIAGES.

BARNES—PENN.—At the residence of Rev. Bristow, No. 15 West Ninth street, Covington, Ky., Dr. T. S. Barnes, of Pike county, and Miss Mollie Penn, of Clermont county, Ohio.

FRENCH—WOOD.—At the residence of her relatives, Mr. and Mrs. Gayle, Newport, Ky., March 5, 1884, by the Rev. S. L. Loomis, Dr. M. R. French, of Cincinnati, and Miss Sarah B. Wood. No cards.

LEMEN—CHICK.—At the residence of the bride's parents, 3214 Morgan street, St. Louis, March 12, 1884, Dr. J. R. Lemen and Miss Ida May Chick.

MURPHY—THOMAS.—In Parkesburgh, Pa., March 13, 1884, by the Rev. James A. Marshall, Walter A. Murphy, M. D., and Sallie K. Thomas.

REEDER—WELLS.—At Spring Lake, Ohio, February 20, 1884, by Rev. H. H. Wells, D. D., the bride's brother, Charles W. Reeder, M. D., of Wickliffe, O., and Emma C. Wells, of Willoughby, O.

ROGERS—CHALMERS.—At the residence of the bride's father, General J. R. Chalmers, near Sardis, Miss., February 21, 1884, Dr. W. B. Rogers, of Memphis, and Miss Kate H. Chalmers.

WORMLEY—MADSEN.—In this city, February 17, 1884, by the Rev. Dr. H. C. McCook, Dr. William Wormley, of Lancaster, Pa., and Emilie Madsen, of Philadelphia.

DEATHS.

DU BOSE.—At Sunflower Landing, Tenn., February 20, 1884, of pneumonia, Dr. W. J. Du Bose.

DU BOSE.—At Sunflower Landing, Tenn., March 6, 1884, Myrtice M. Du Bose, wife of the late Dr. W. J. Du Bose.

ELWYN.—In this city, March 15, 1884, Alfred Langdon Elwyn, M. D., in the eightieth year of his age.

FISHER.—In St. Louis, March 10, 1884, Dr. Gustavus Fisher, aged seventy-two years.

HURDSFIELD.—At his late residence, 261 West Thirty-eighth street, New York city, Monday, March 3, 1884, John Hurdsfield, M. D., in the fortieth year of his age.

KEITH.—At Jacksonville, Florida, Thursday, March 13, 1884, Dr. Bethuel Keith, formerly of this city and Stamford, Conn.

McDONNELL.—At his late residence, 148 East Forty-fourth street, New York city, Saturday, March 8, 1884, after a lingering illness, Dr. P. W. McDonnell, Police Surgeon.

MERCER.—In Jeffersonville, Ind., February 28, 1884, of paralysis, Dr. Thos. C. Mercer, a native of Louisville, Ky. aged sixty-four years.

WILLARD.—In Haddonfield, N. J., March 10, 1884, Roland Willard, M. D., in the ninetieth year of his age.

WOOD.—At his late residence, in Flushing, N. Y., March 7, 1884, Stephen Wood, M. D., aged seventy-three years.

MORRIS.—In this city, March 17, 1884, Caspar Morris, M. D., in the seventy-ninth year of his age.

PULTE.—In Cincinnati, Ohio, Sunday, February 24, 1884, at 4 a. m., of general debility, Dr. Joseph H. Pulte, in the seventy-third year of his age.

STILLMAN.—In Troy, N. Y., March 21, 1884, Dr. A. G. Stillman. He was a pupil of President Arthur in the District School at Pownal, Vt.

DOUGLASS.—March 13, 1884, Dr. J. H. Douglass, aged seventy-five years.